

NEW EDITION
Fully Revised and Reset

THE CONQUEST OF CIVILIZATION

By

JAMES HENRY BREASTED

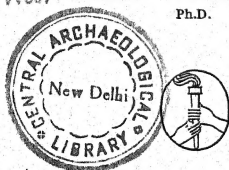
Ph.D., LL.D., D.Litt. Oxon.

*Including New Text, the Author's
Own Revisions and Notes*

Edited by

EDITH WILLIAMS WARE

Ph.D.



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THE CONQUEST OF CIVILIZATION

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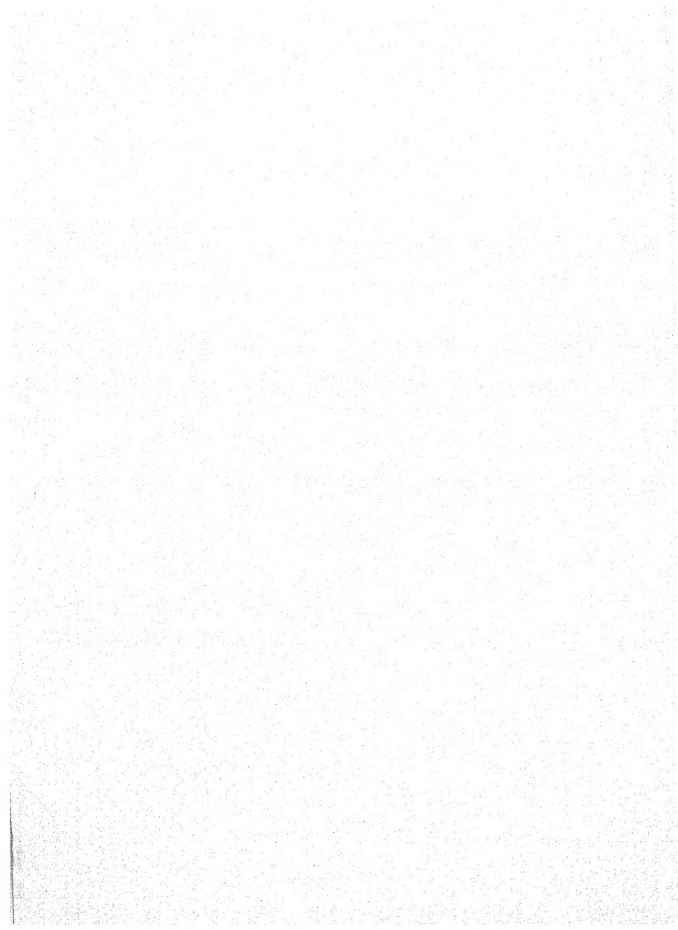
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PUBLISHER'S NOTE

THE present new, basically revised edition of *THE CONQUEST OF CIVILIZATION* represents the last labor and embodies the maturest conclusions of its author. During the decade since publication of the first edition, Dr. Breasted had marshalled the wealth of important new results accruing not only from the many field expeditions of the Oriental Institute—which he had founded as a “laboratory for the study of the human career”—but from the work of every other accredited archeological investigator of the Mediterranean and the Near East. He had already made considerable progress in preparing the new manuscript when death claimed him.

It is singularly appropriate that the task should have been completed by one who, during the last dozen years of his life, was his scientific assistant in the production of his later books—Dr. Edith Williams Ware, who won her doctorate in Egyptology as one of his ablest students.

THE PUBLISHERS.



INTRODUCTION

JAMES HENRY BREASTED was the first American historian of the New Past. It was he who suggested the phrase "New Past" as signifying that more comprehensive view of man's early career which has developed from the archeological discoveries of the last century. Before these discoveries, even the specialist's idea of the past included little more than the story of the Greeks and Romans, with the chronicles of the Hebrews, against a vague background of the unexplored ruins in Egypt, in Babylonia, and at Nineveh.

By the beginning of the twentieth century, however, excavators had unpacked their spades and set up their tents at key places throughout the lands at the eastern end of the Mediterranean. The Egyptian, Persian, Babylonian, and certain related languages had been deciphered. Maspero, the French archeologist, and Eduard Meyer, the German historian, had courageously attacked the staggering mass of new material and had written splendid historical sagas of the ancient past. But no American scholar had produced an epic summary of the human story in terms of social, economic and cultural developments, until in 1916 Dr. Breasted prepared for students his famous survey of the New Past, *Ancient Times*.

Certainly the volume constituted a fundamentally new departure in the historical presentation of the ancient world. The traditional interpretation of ancient history as past politics and wars was wholly abandoned. It struck a new logical balance in which the Orient occupied its appropriate place. In its original form, it has been translated into many languages, and is even available in a Braille edition.

So cordial was the response of the public to *Ancient Times* that Dr. Breasted was induced in 1926 to prepare a somewhat more mature book, based on the foregoing text but without the pedagogical details. This book he called the *Conquest of*

INTRODUCTION

Civilization, a title envisaging Man as having set out on a great adventure—the “Human Adventure”—during the course of which he had, by overcoming tremendous difficulties, passed along a “*rising trail*,” steadily upward from the savagery and darkness of his origin.

As he grew older, Dr. Breasted became increasingly convinced of the “unconquerable buoyancy of the human soul” which he saw as the “driving power” behind man’s conquest of civilization. For him the slumbering wreckage of buried ancient cities symbolized not futility or *sic transit gloria mundi*, but evidence of the indomitability of man. Nowhere did he express this philosophy of history more appealingly than in the following quotation from his preface to the first edition of the *Conquest of Civilization*:

“As I write these lines, the broad Palestinian plan of Megiddo stretches before me; behind me rises Har-Megiddo, the Mount of Megiddo, or, as known to the Western world in its Hellenized form, Armageddon. Towering high over the plain, Armageddon was an imposing stronghold, though now deeply covered by the rubbish of thousands of years, green with billowing grain and bright with nodding anemones. As I went into the court of our new Oriental Institute house on the slopes of Megiddo this morning and the early sunshine illumined a recently excavated block bearing Egyptian hieroglyphs, it became evident that the fragmentary signs, scarred and weathered till they were scarcely legible, were those forming the name of Shishak, called by the Egyptians Sheshonk, a Pharaoh of the tenth century B.C.

“Instantly there rose before me the vision of a Sunday school in a little church on the far-off prairies of Illinois, where nearly half a century ago a group of village boys with heads together over a Bible were struggling with the difficult proper names of an old Hebrew chronicle: ‘And it came to pass in the fifth year of King Rehoboam that Shishak, king of Egypt, came up against Jerusalem: and he took away the treasures of the house of Jehovah, and the treasures of the king’s house, he even took away all: and he took away all the shields of gold that Solomon had made.’

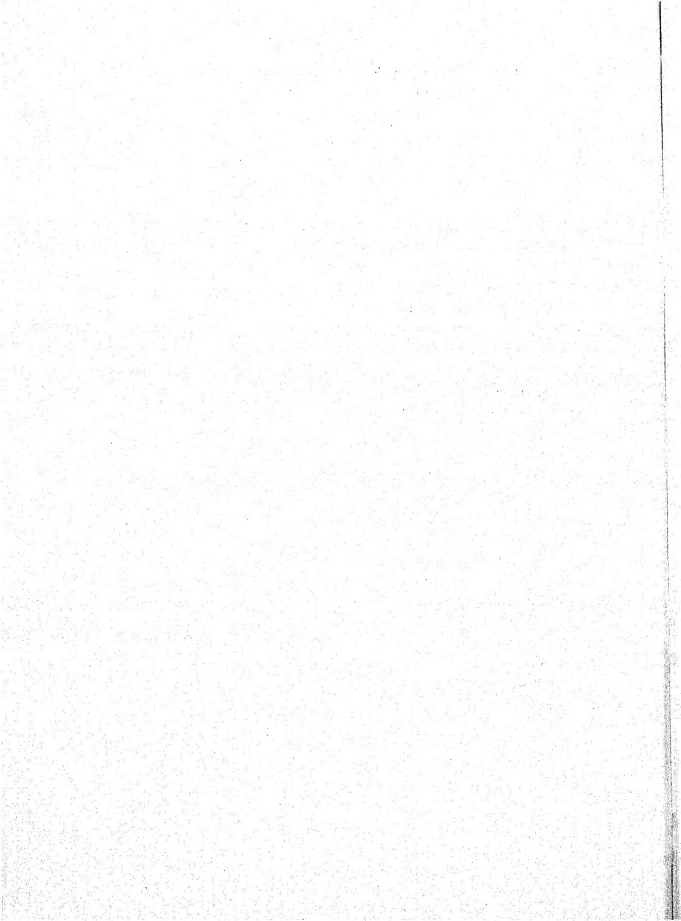
INTRODUCTION

"And today under the shadow of the great fortress mound, it was with some emotion that one of those boys was reading the name of the old Egyptian conqueror, who carried away Solomon's treasure from Jerusalem nearly 3000 years ago. Here it is—still surviving in the strong city of Palestine, whither the Pharaoh had marched, sixty miles north from Jerusalem. It is an impressive illustration of the fact that for ages Armageddon has been the gate between two continents, for possession of which the emperors and kings of Asia and Africa have struggled. Through the pass which it commands, the armies of Egypt marched for a thousand years. And through this same pass upon which Armageddon still frowns down, Lord Allenby pierced the Turkish lines and won the last great battle of Armageddon in 1918. What more fitting scene in which to write the foreword of a sketch which endeavors to trace in its main contours the unfolding life of man—the Conquest of Civilization!"

In this conquest and triumph Dr. Breasted found encouragement to hope for the future. He looked back and saw what man had already achieved, in spite of frequent maladjustment and conflict. He compared early man slinking silent and alone through savage wildernesses with modern man who may communicate to the ends of the world his thoughts of the moment. Dr. Breasted was convinced that the force which has brought man so far remains visibly present and operative. As a consequence the past, present, and future of mankind are linked in a continuity of progress, and man still faces the heights.

EDITH WILLIAMS WARE

Oriental Institute,
The University of Chicago
June, 1937



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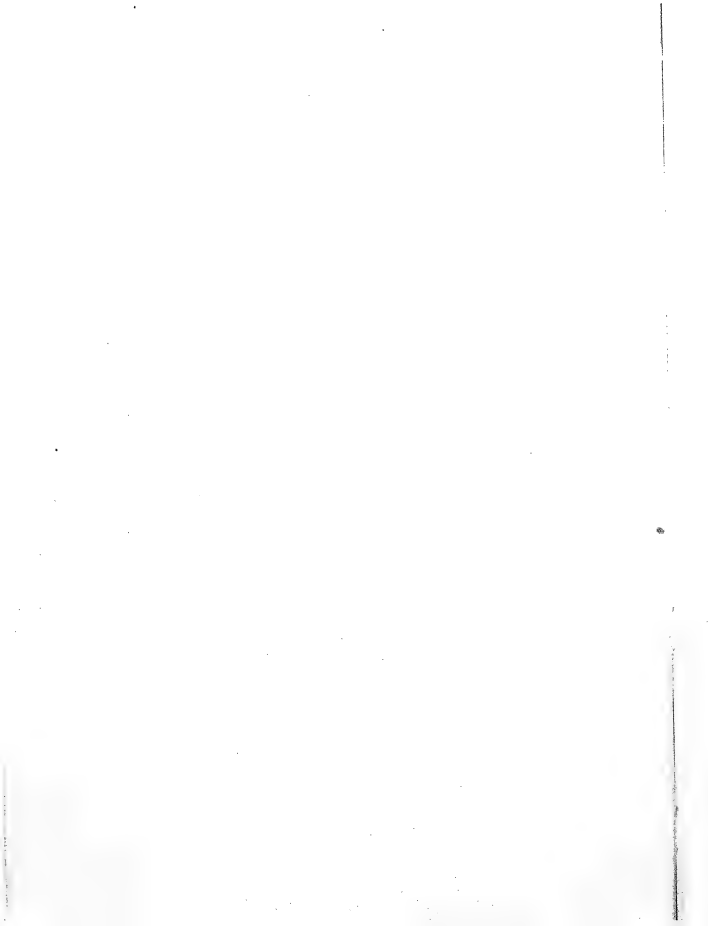
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PART I

THE EARLIEST HUMAN PROGRESS



CHAPTER I

HOW MANKIND BEGAN AS FOOD-GATHERERS

Man's Earliest Ways of Living

IT IS but a few centuries ago that the dash of a hungry forest wolf, snatching a child from the street, was far from an unknown experience in the villages of northern Europe. At the present day in India the man-eating tiger and in Africa the predatory lion continue to slay and feed on man. But notwithstanding their superior strength the vast mammals of the past have slowly suffered extinction. They have fallen before opposing natural forces which man has nevertheless survived. As man developed increased ability to compete with his mammalian rivals for possession of the earth, his advance has been relentless and annihilating. Even before the rude weapons of prehistoric man the giraffe and the elephant disappeared from the lower Nile Valley at the beginning of the historic age, while the hunt-loving sovereigns of the Ancient East exterminated the Asiatic elephant on the plains of the upper Euphrates several thousand years ago. We are all familiar with the practical extinction of the bison on our own continent; the last surviving families of the gorilla are about to disappear in Africa; and such has been the improvement of man's weapons in the last few generations that in the opinion of the natural scientists we have practically reached the close of the Age of Mammals.

All this is but a single and more obvious phase of the victory of man. His slowly achieved supremacy has been a very gradual process now traceable by modern science for hundreds of thousands of years of human advance. We can observe stage after stage of his growing ability to survive among competing forms of life and against opposing forces of nature—an ability enormously increased and transformed when he became the first and only implement-making creature. Various animals have been known to seize a stick or a stone and employ it as an implement. This must have been done very often by our earliest savage ancestors. But earliest man went on to take a further step of fundamental importance and one never taken by any other creature. He noticed that his stone, as

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furnished ready made by nature, was not well suited to its purpose; that is, he inspected its shape and ventured to disapprove of it. Disapproval is a very important factor in all progress. There has really never been any progress without it. Striking his native rock fragment upon another stone, some primitive man with more initiative than his fellows endeavored to improve the shape of the pebble he had picked up, and to suit its shape to the use for which he needed it. In so doing he became the first implement-making creature—a creature with the intelligence not only to satisfy his hunger with dead matter, but also to shape dead matter into instruments which gave him greater control over the world about him, living or dead.

The practice of this art of making tools, implements, and mechanical devices has never ceased to exert the profoundest influence on the rise of man, and the appearance of this implement-making ability in human life completely transformed man's situation. In considering the matter it is well to look first around us and then backward. We all know that our fathers and mothers never listened to a "radio," nor ever saw an airplane when they were children, and very few of them had ever ridden in an automobile. Their fathers lived during most of their lives without electric lights or telephones in their houses. Their grandfathers, our great-grandfathers, were obliged to make all long journeys in stage-coaches drawn by horses, and some of them died without ever having seen a locomotive. One after another, as they have been invented, such things have come and continue to come into the lives of men.

Each device grew out of earlier inventions, and each would have been impossible without the inventions which came in before it. Thus, if we should go far back into the history of mankind, we would reach a point where no one could build a stage-coach or a wagon because no one had invented a wheel or tamed a wild horse. Earlier still there were no ships and no travel or commerce by sea. There were no metal tools, for no one had ever seen any metal. Without metal tools for cutting the stone there could be no fine buildings or stone

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structures. It was impossible to write, for no one had invented writing, and so there were no books nor any knowledge of science.

If we go back far enough in the story of man, therefore, we find him a savage but little higher than the most advanced beasts among which he lived. He possessed nothing whatever but his bare hands with which to protect himself, satisfy his hunger, and meet all his other needs. He must have been without organized speech and unable even to build a fire. There was no one to teach him anything. Beginning in this situation, the earliest men had to learn everything for themselves by slow experience and long effort. Not only had every tool, however simple, to be invented, but there must have been ages of savage mental twilight when there was no realization that such things *could* even be or that man could produce them. To no small extent the story of man's career is one of conquest of material resources by means of highly varied devices, tools, implements, and machinery, if we include also with these things the consequences, social, political, artistic, and religious, which resulted from their introduction. The steam or gasoline cylinder is as truly the symbol of the present age as the stone fist hatchet is the sign manual of the Stone Age life of two hundred thousand years ago.

People so entirely without any mechanical devices as the earliest men must have been no longer exist on earth. Nevertheless, their situation at the beginning is illustrated by the lowest savage tribes, some of whom when found were still leading a life very much like that of our primitive ancestors. For example, the recently extinct Tasmanians, the people whom the Dutch found on the island of Tasmania nearly three centuries ago, wore no clothing; they had not learned how to build a really roofed hut; they did not know how to make a bow and arrows, or even to fish except by spearing. They had no goats, sheep, or cows; no horses, not even a dog. They had never heard of sowing seed or raising a crop of any kind. They did not know that clay would harden in the fire, and so they had no pottery jars, jugs, or dishes for food.

Naked and houseless, the Tasmanians had learned to satisfy

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only a very few of man's needs. Yet that which they had learned had carried them a long way beyond the earliest human beings. They could kindle a fire, which kept them warm in cold weather, and over it they cooked their meat. They had learned to construct very good wooden spears, though without metal tips, for they had never heard of metal. These spears, tipped with stone, they could throw with great accuracy, and thus bring down the game they needed for food, or drive away their human enemies. They could take a flat stone and, by chipping off the edges to thin them, they could make a rude knife with which to skin and cut up the game they killed. They were also very deft in weaving cups, vessels, and baskets of bark fiber. Above all, they had a simple language, with words for all the ordinary things they used and did every day.

For several hundred thousand years the earliest men lived a life far less civilized than that of the Tasmanians. The evidences of this uncivilized life have been found in many parts of Europe, Asia, and Africa, but where the processes of developing life which we call *evolution* first brought forth physical man, no one knows. There is as good evidence that man first appeared in Africa as there is for his origin in Asia. His advent occurred far back in the period which the geologists call the Pliocene, some millions of years ago. He was at first no more capable of leaving behind him durable evidence of his presence than were the less intelligent animals among which he lived. The advance which lifted him above his animal competitors was almost imperceptible at first, and indeed the progress which brought him to the threshold of civilization occupied a period of millions of years and was therefore enormously slow, even after it was accelerated by his discovery and use of his own implement-making ability, probably a million years ago.

In western Europe the archeologists have been able to put together a very detailed story of mankind before the existence of written records. Recent discoveries in Africa, Asia, and eastern Europe have to a great extent confirmed the conclusions reached by the scholars working in western Europe. There is

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in all the regions investigated a general similarity in the sequence of the stages of man's progress towards civilization. It is, however, obvious that such progress would not occur simultaneously and uniformly in different parts of the world. For instance, written records were made in Egypt and Western Asia at least three thousand years before any system of writing was used in western Europe; and the people of Egypt and Western Asia were using metal implements and carrying on foreign trade in sailing-vessels while the men of Europe were still building their houses with stone tools and apparently knew no means of navigation other than the dugout. Indeed, it is now generally conceded that the older phases of that civilization which prevails today did not arise on the continent of Europe, but were first developed at the eastern end of the Mediterranean in the lands of Egypt and Western Asia. It is preferable, nevertheless, to follow the story of the developing civilization of earliest man throughout the entire Mediterranean area rather than in any one locality, for these men lived all around the Mediterranean Sea and spread far inland: northward to the North Sea and across the British Isles, southward far across Africa in what is now the Sahara Desert, and eastward beyond the Persian Gulf.

When man first appeared, the lands in the Mediterranean area were very different from what they are today. Lofty forests not only fringed the streams of Europe and clothed many of its wide plains, but they covered also some of the Sahara Plateau, which at that time was, for the most part, a green and well-watered region. The huge hippopotamus wallowed along the shores of the rivers, and the fierce rhinoceros charged through the heavy growth on the river banks. Elephants with gigantic tusks herded with the last of the European mastodons. In Europe the ancestors of our domestic cattle grazed on the uplands, and the broken glades sheltered numerous herds of deer. Vast herds of wild horses wandered as far south as Italy. The presence of great African mammals like the southern elephant (*Elephas meridionalis*), whose bones are found today along the high terraces of the Seine or in the valley of the Thames, demonstrates a connection of



SWAN
(After Tournier
and Costa de
Beauregard)



BIRD
(After
Passemard)



IBEX
(After Lemozi)



ASS AND FOAL
(After Frobenius-Obermaier)



WILD CATTLE
(After Capitan-Breuil-Peyrony-
Bourrinet)



BOAR
(After Obermaier-Wernert)



BEAR
(After Capitan-Breuil-Peyrony)



LION DEVOURING ANTELOPE
(After Flamand)



RHINOCEROS
(After Capitan-Breuil-Peyrony)

FIG. 1. ANIMALS OF THE STONE AGE

This is only a few of the many animals which we may find represented in the paintings and drawings of Stone Age man. See also Fig. 6

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Europe with Africa in some distant age, when these animals could wander *by land* from Africa to Europe and back again.

With nothing to cover their nakedness, early men roamed stealthily through the great sequoia forests, gathering their daily food among the roots, seeds, and wild fruits wherever they could find them, and listening with keen and eager ear for the sound of small game which they might be able to lay low with their rough wooden clubs; for we must conclude that they would be using such weapons of wood as the forest furnished ready-made in the form of fallen branches. It must have been in this Age of Wood, of which the tools and weapons have now all perished, that some primitive man felt the first creative impulse on our globe and discerned that he could *shape* the rough fallen branch and make it a better weapon or tool. It was then that the first implement-making creature was born, the earliest ancestor of Watt and Edison.

At some point in the primitive stage of man's development the vocal signals of fear or hunger, thirst or distress, developed into the simplest form of speech. With warning cries to their fellows early men must often have fled in terror as they felt the thunderous tread of the giant animals of the forest or caught glimpses of herds of huge elephants in the distance.

At night, after cutting up the flesh of their prey presumably with wooden knives and devouring it raw, the hunters slept wherever the game had led them. Not knowing how to make a fire to ward off the savage beasts, they lay trembling in the darkness at the roar of the mighty saber-toothed tiger.

At length, however, they learned to know fire, perhaps finding it in the forest when the lightning smote a tree into flame. They must have learned to fear it, too, as they stood far off and viewed such terrible volcanoes as Etna and Vesuvius. It was a great step forward when early men at last found out how to produce fire themselves. They could then cook their food, warm their bodies, and harden the tips of their wooden spears in the fire. But their dull wooden knives they could not harden, and so perhaps they learned to make knives of bone; or they sometimes picked up a broken stone and used its

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ragged edge. When, probably a million years ago, they had learned to *shape* the stone to suit their needs, and thus produce a rude tool or weapon, they entered what we now call the Stone Age.



FIG. 2. A GROUP OF NORTH AMERICAN INDIANS MAKING FLINT WEAPONS

The farthest Indian is prying loose a large stone. This is the raw material, which is then taken by the middle Indian, who crashes it down upon a rock and shatters it into fragments. One of these fragments is then taken by the nearest Indian, who holds it in his left hand while he strikes it with a stone in his right hand. These blows flake off pieces of flint, and the Indian is so skillful that he can thus shape a flint hatchet. This process of shaping the flint by blows (that is, by *percussion*) was the earliest and crudest method and produced the roughest stone tools. (After Holmes)

The stone weapons and tools which these savages then began to make did not rot and disappear like their bone and wooden ones. We can hold in our hands the very stone tools and implements with which early men maintained themselves in their unceasing struggle to obtain food and to survive in competition with the gigantic animals around them. These stone implements, together with the actual remains of early human bodies lying in geological strata, have demonstrated beyond any possible doubt the vast length of time since man first appeared on our

planet. Until a short time ago it was supposed that human history was comparatively brief. Moreover, everyone took it for granted that the earlier period of man's past had left no surviving traces. An old letter written in London over two hundred years ago (1714) tells how a certain apothecary discovered bones of an elephant in a gravel-pit near London,

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and, near by, also a flint weapon. This letter was soon afterward published, together with a drawing of the stone weapon, and it was suggested that the animal must be a war elephant brought in by the Romans! No further attention was paid to the discovery and it was soon forgotten. For over a century similar finds, both in England and on the Continent, met with the same fate. It was not until two generations ago, during the American Civil War, after the evidence had been available for over a century and a half, that the eyes of scientific men were opened to the fact of the enormously long sojourn of man on earth.

By the long trail of stone implements which men began to leave behind them probably a million years¹ ago, we can now follow them and see how far they had advanced toward better methods of living. This advance is revealed to us by their increasing skill in shaping stone and by their improvement in other industries which they gradually learned.

The modern search for tools or other artifacts left by Stone Age man began in Europe, especially in France. There the rude stone tools and weapons of the early hunters and the bones of the huge animals they slew had sometimes been left lying side by side in the sand and gravel far up on the valley slopes where in prehistoric ages the rivers of France once flowed, before their deep modern beds had been eroded. Indeed, excavators in France discovered so many remains of Stone Age life that great museum collections of stone artifacts were established there. Later such remains were found to be as plentiful in other European countries. Recent exploration in

¹ The beginning of the implement-making stage was carried back by the Prehistoric Survey of the Oriental Institute of the University of Chicago in Egypt to the Plio-Pleistocene interval, that is, to or just before the beginning of the Pleistocene or Ice Age. The geologists of America regard the upper Mississippi Valley as the best place in the world for the study of the time element in the Glacial Age. Long and detailed study, especially of the Iowan stages, has led Dr. George F. Kay to conclude that "it would seem safe to state that the Pleistocene [= the Glacial Age] involved probably a million years, possibly twice this length of time." See vice-presidential Address by George F. Kay on "Classification and Duration of the Pleistocene Period," in *Bulletin of the Geological Society of America*, Vol. 42 (1931), p. 466. It must be remembered that the present state of researches makes any attempt at dating hazardous.

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North Africa has likewise revealed widespread stone artifacts stretching from Algiers to the lower Nile Valley, and the same is true of Asia along the eastern shore of the Mediterranean. We are thus able to study thousands of stone weapons and implements from the entire Mediterranean area. They disclose to us the fascinating story of the earliest human progress, after men had found they could chip stones.

Although they perished probably in great numbers as their dangerous life went on, the earliest men continued for thousands of years the uncertain struggle for survival. They slowly improved their rough stone tools and probably learned to make additional implements of wood, but these have, of course, rotted and disappeared, so that we know nothing of them. There was not a beast which was not the foe of these hunters, who had to pit their little weapons and their cunning against the power and cunning of the animal world. There was as yet no dog, no sheep or fowl to which they might stretch out a kindly hand. The ancestor of the modern dog was then a fierce wolf-like creature of the forest, leaping upon the hunter unawares; and those beasts which were the ancestors of our modern domestic animals still wandered the forests in a wild state. Although thus heavily handicapped in the contest for existence, the man of the Pliocene period was in one respect more fortunate than his immediate successor, for he lived in a warm temperate climate where the gathering of food was not an overwhelmingly difficult matter.

The Great Ice Age and Paleolithic Man

The earth was at this time rich with animal and vegetable life, but it was destined to pass through one of the most critical periods of its history. There had been a great deal of mountain-making and earth movement in the Pliocene period, and when this was followed by extreme climatic changes, the result was almost catastrophic. Geologists and climatologists have not yet found out exactly why, but for thousands of years the climate grew steadily colder and more moist. There was, therefore, an increasing snowfall, especially on the summit of the mountains. It is supposed that ice began to accumulate around

THE GREAT ICE AGE AND PALEOLITHIC MAN

these centers of snowfall. Finally there were formed great sheets of inland ice, which, it is estimated, covered at the maximum extent about twelve million square miles of the earth's surface. During the period of severest glaciation there is evidence that the ice extended across North America, as far south as Long Island and westward along the valleys of the Ohio and the Missouri. In Europe and Asia the edges of the great northern ice sheet reached almost to the south coast of England and stretched southeastward across central Europe to about the fiftieth parallel of latitude in the Dnieper Valley, and thence northeastward to the Ural Mountains. Other areas of glaciation seem to have radiated from the Pyrenees, the Alps, the Carpathians, and the Balkans, in Europe; from the coast ranges of Asia Minor, the Lebanon, the Caucasus, the Zagros, and other Persian ranges, in Western Asia; and from the great heights of central Asia. In the southern hemisphere most of the glaciation of this period took place on the Antarctic Continent. This period of glaciation we shall call the Great Ice Age,¹ to distinguish it from the other glacial periods which occurred in earlier eras of earth history.

Geologists seek to determine the movements and extent of the ice sheets by the drift or material which these sheets deposited. Such evidences of ice-sheet movements are found in boulder-beds known as till, in banded or laminated clays known as varves, or in the striated or grooved rocky floor over which the sheet has passed. One conclusion reached from the study of the drift is that there were several glacial periods separated by warmer intervals when the ice sheets were entirely melted or considerably shrunken. At present the geologists differ as to the number of these periods of glaciation, but all are agreed as to the contrasts in climate during the Great Ice Age, and the consequent advance and recession of the ice sheets off and on for perhaps a million years.

Of course in the areas immediately surrounding the ice

¹ The reader must realize that this last period of glaciation may not be ended, for continental ice sheets still cover Greenland and the Antarctic Continent. The present may be, therefore, but an interglacial period.

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sheets it must have been very cold, but even during periods of extreme glaciation large parts of France, Austria, and Germany were never ice covered. Moreover, many of the deposits of the interglacial periods contain fossil remains of warm temperate or subtropical creatures such as the hippopotamus and lion in England, and the camel and tapir in the southern United States. During the intervals between periods of glaciation, therefore, the climate of Europe and North America might have been as warm as it is today. Thus great stretches of territory in North America and Europe were habitable during the whole period of the Great Ice Age, which the geologists call Pleistocene.

The invasion of the ice, nevertheless, made life very difficult for early men on the north of the Mediterranean basin, and it is probable that these earliest Europeans made greatest cultural progress during the intervals between the periods of glaciation. If we examine a map of North Africa, however, we shall see that in the region just south of the Mediterranean basin there was only one area of glaciation, and that in the extreme west in the vicinity of the Atlas Mountains. Hence the entire Southern Flatlands in North Africa, the region which we now call the Sahara Plateau, was never visited by the ice. The same atmospheric moisture which in frozen form built up the vast glaciers on the *north* side of the Mediterranean, probably fell as plentiful rain on the *south* side. The Sahara Plateau was, therefore, well watered and in many parts of it there were meadows, forests, and jungle growth. Across this fertile region the North African hunters probably pursued the same animals as exist today on the tablelands of central and southern Africa. Often these early men followed the game down into the wide and deep gorge which the Nile had already cut clear across the eastern end of the Sahara.

The Nile was at that time a much larger river than now. Like the Missouri River it sometimes shifted its bed and then never went back to the old one. One of the now dry beds of this larger early Nile, a stretch over fifty miles long, parallel with the present river, has recently been discovered. On digging into its gravels, which are sixty feet deep, the archeolo-

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gists found that it contained stone weapons of the earliest hunters of the Southern Flatlands, who must have lost them there as they sought their game on the banks of the river, probably a million years ago.

The earliest well-formed stone implements made by man are known as paleoliths, and archeologists have come to call the age in which prehistoric men made such implements the Paleolithic ("Old Stone") Age. If we fit this age into the geologic periods of earth history, we shall find that in all the lands around the Mediterranean paleoliths have been discovered in Pleistocene strata. The Paleolithic Age of man, therefore, coincided with much of the period of the Great Ice Age.

Paleoliths were made of flint and were flaked to the right shape and size by two methods: the earlier by *percussion*, that is, chipping by blows with another stone; and the later by *pressure*, usually with a hard piece of bone (or horn), first on one side, and then on both sides.¹ The most typical implement among the earliest paleoliths is a kind of ax. Indeed, it seems to be the earliest of the heavy hand-tools, and is variously called *coup de poing*, fist-hatchet, or hand-ax. Specimens have been found in Paleolithic gravels all around the Mediterranean, and similar implements have been found in many other parts of the world. The fist-hatchets are thus the earliest widely distributed human devices which have survived to our day. Other later flints flaked by Paleolithic man seem to have served as awls, scrapers, knife blades, points (probably for use on hunting missiles), choppers, and hammers.

If we consider Paleolithic man from a social and industrial point of view, we find he belonged to that group which the ethnologists call food-gatherers. Among the primitive peoples the food-gatherers are those people who take what nature has to offer them and do nothing to augment or add to the natural processes of food-production. The men bring home the meat which they have taken in the chase, and the women gather the fruits and grains which they find growing. Although such people generally have no fixed habitation and usually wander

¹ When discovered by the Dutch the Tasmanians still used implements made according to Paleolithic methods.

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in order to gather food elsewhere after they have exhausted the supply in one locality, it is most interesting to find that in Paleolithic Europe certain sites were occupied by man period after period. This was probably mainly caused by the extreme cold and the scarcity of warm dry caves or rock shelters. Another reason for the continued presence of early men in certain localities may have been the existence in those localities of particularly good beds of flint from which material for implements might be obtained. Some of the caves and rock shelters, consequently, contain in stratified layers a complete archeological record of the progress of Paleolithic man from the period when he first began to produce definitely formed flints.

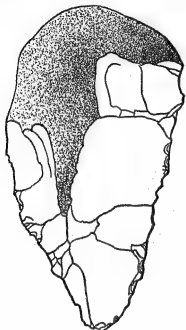


FIG. 3. A FLINT FIST HATCHET, FOUND IN AN ANCIENT BED OF THE NILE

This tool was usually grasped in the fist by the thicker part, and never had any handle. The original of the above illustration is about seven and one-half inches long, and was found by the Oriental Institute of the University of Chicago

In these Paleolithic sites have been found burials containing human remains, personal adornments, and weapons or tools—these last perhaps as equipment for an after life. Such burials show not only that Paleolithic man was a thinking animal, but the fossil bones disclose to us also something of his physical characteristics. That he was a representative of an earlier stage in man's slow advance is evi-

dent from his short stature (four feet eight to five feet three), his stooping posture with his head thrust forward, his short legs, his retreating forehead, the prominent ridges over his eyes, his broad nose, and his protruding jaws. He is commonly called the Neanderthal Man, after the region of Germany where one of the best specimens of his type was found in 1856. He survived probably thousands of years. Slowly but

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relentlessly he was displaced by a more intelligent rival, whom we call Aurignacian Man, after the cavern of Aurignac in France where seventeen bodies of his type were found. Several physical types are now included in this term. All of them are taller and with larger brain than their Neanderthal rivals; but one of the Aurignacian types is not tall, always under five feet six, while another Aurignacian type, called Cro-Magnon Man after the French cavern of this name, is a magnificent specimen sometimes reaching a stature of six feet four and a half. These Aurignacians were decidedly more like modern men.

The Aurignacian hunters were also more skillful craftsmen than their Neanderthal predecessors. They learned to flake their flint implements with greater precision and symmetry than before, and they produced more highly specialized tools. The pressure-chipped edges, flaked on both sides, were sharp enough to cut and shape even bone, ivory, and especially reindeer horn. The mammoth furnished the hunters with ivory; and when they needed horn they found great herds of reindeer, driven southward by the ice. The reindeer became at this time man's greatest dependence. He used the hide for clothes, the flesh for food, and the horns and bones for weapons. Indeed, this period has sometimes been called the Reindeer Age.

With their new and keener tools, the hunters worked out barbed ivory spear-points, which they attached to long



FIG. 4. TWO VIEWS OF A SPEAR-THROWER USED BY A PALEOLITHIC HUNTER

(A) seen from the front; (B) seen from the side. It is carved of reindeer horn to represent the head and forelegs of an ibex. Observe the hook at the top of B for holding the butt of the spear-shaft. The spear-thrower and the bow were the earliest devices of man for hurling his weapons with speed

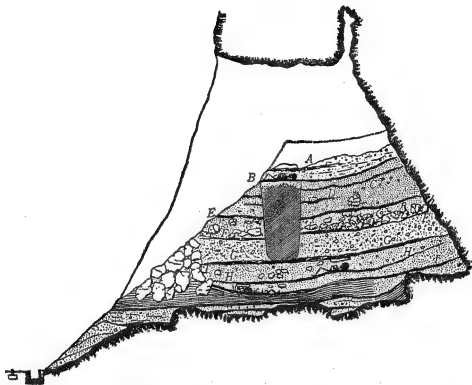


FIG. 5. A CROSS SECTION SHOWING THE LAYERS OF RUBBISH AND THE HUMAN REMAINS IN A CAVERN OF THE PALEOLITHIC AGE

This cavern is at Grimaldi, on the Italian coast of the Mediterranean. The entrance is at the left, and the back wall at the right. We see the original rock floor at the bottom, and above it the layers of accumulations, 30 feet deep. The black lines *A* to *I* represent layers of ashes, etc., the remains of nine successive hearth-fires, each of which must have been kept going by the natives for many years. The thicker (lightly shaded) layers consisted of bones of animals, rubbish, and rocks which had fallen from the roof of the cavern in the course of ages. The lowermost layers (below *I*) contained bones of the rhinoceros (representing a warm climate), while the uppermost layers contained bones of the reindeer (indicating a cold climate). Five burials were found by the excavators in the layers *B*, *C*, *H*, and *I*; layer *C* contained the bodies of two children. The lowermost burial (in *I*) was 25 feet below the surface of the accumulations in the cave. Since the above drawing was made, excavators digging in front of the cavern have penetrated to a depth of 60 feet below the original surface of the accumulations and have continued to find flint implements and other evidences of human occupation. (After Déchelette)

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wooden shafts, and each carried at his girdle a sharp flint dagger. During this period they must have invented the bow and arrow also, for we find rock paintings which show the hunters using them. For straightening their wooden spear shafts and arrows they made an ingenious shaft-straightener of reindeer horn. Another clever device of horn or ivory was a spear-thrower by which a hunter could hurl his long spear much farther and with greater force than he could before. Harpoons and fish hooks indicate that Stone Age man was becoming a fisherman as well as a hunter. Fine ivory needles show that these people learned to protect themselves from cold and from the brambles of the forest wilderness with clothing made by sewing together the skins of the animals slain.

Thus equipped, the hunters of the late Paleolithic Age were much more dangerous foes of the wild creatures than were the men of the earlier period. In a single cavern in Sicily modern archeologists have dug out the bones of no less than two thousand hippopotamuses which these hunters killed. In France one group of such men slew so many wild horses for food that the bones which they tossed about their camp fires gathered in heaps, finally forming a layer in some places six feet thick and covering some 40,000 square feet, an area about equal to four modern city lots of fifty by two hundred feet. Among such deposits excavators have found even the bone whistle with which a returning hunter was able to announce his coming to his hungry family waiting in the cave. On his arrival there he found his home surrounded by revolting piles of garbage. Amid foul odors of decaying flesh this savage European crept into his cave-dwelling at night, little realizing that, many feet beneath the cavern floor on which he slept, lay the remains of his ancestors in layer upon layer, the accumulations of thousands of years.

In spite of the darkness and savagery of their daily life these primitive hunters were standing just at the breaking of the first great light that entered the souls of men. Each of these hunters, when he lay down in his cavern at night, could close his eyes and see mind-pictures of the great beasts he had been pursuing all day. He could recall likewise curious trees the

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shape of which sometimes reminded him of an animal, or he might turn as he lay and see a bulging mass of rock in his cavern, which looked like the form of a horse. Thus there arose slowly in his mind the idea of *resemblance*: the animal and the tree that looked like it, the horse and the rounded rock that looked like the horse. As this thought continued, he began to be aware that the resemblance of the bulging rock to a horse might be aided by his own hands; until he next discovered that he himself could imitate the form of one object by shaping another like it. In this way the possibility of *imitation* awoke in his mind. In that moment art was born, and the soul of man entered a new and beautiful world filled with a light that had never brightened his life before. For ages his *body* had been developing, but in this new realization that he might create beautiful forms out of the storehouse of his memory, his *mind* rose to a new and higher level. Sketches on small stones have been found, made by beginners just learning to draw. They are like modern studio exercises, still showing the corrections by the more skilled hand of the master.

The new and *creative* age of man's prehistoric life has been revealed to us in an amazing series of works of art discovered in Paleolithic sites. This art takes, on the one hand, the form of engravings and carvings, in relief as well as in the round, on bone, ivory, horn, or stone movable objects. Some of these are objects of utility, such as spear-throwers, lamps, harpoons, painter's palette; while others seem to be simply pictures engraved or carved on slabs of limestone or stray pieces of bone or ivory. More pretentious, although no more astounding, are the monumental engravings and paintings which adorn the walls of caves and rock shelters in France, Spain, and Italy. In North Africa related examples of this art survive on rocks under the open sky, from Algiers, across the Sahara, eastward to the upper Nile. The paintings themselves are very wonderful, but just as remarkable is Paleolithic man's knowledge of pigments. The colors used were red, yellow, and black, and the powdered pigment was kept in little tubes made of hollow bones, some of which have been found in the cave sites. Other surviving equipment of the Paleolithic artist includes

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pestles for grinding pigment, palettes, and a flint graver apparently *in situ* near an engraving on a cave wall.

All these remains show what a high degree of technical skill Paleolithic man had developed and how this skill had probably enabled him to get more pleasure out of life. But Paleolithic man made no further progress in civilization. In Europe,

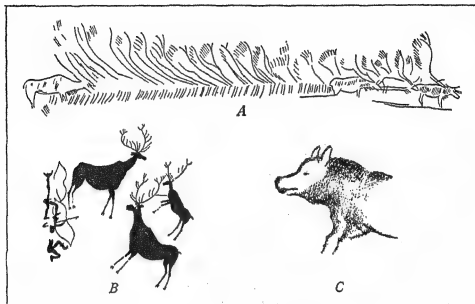


FIG. 6. EXAMPLES OF STONE-AGE ART

The herd of reindeer sketched in *A* is carved on the wing bone of an eagle. This drawing shows that the earliest artists had some ideas about composition in art and were able to draw a group of animals so as to give an impression of a great number in an almost modern way. *B* is a hunting scene painted on a rock shelter by Stone Age man after he had invented the bow. The painting of a wolf, *C*, is from a cave in France. (After Breuil)

as the climate moderated and the glaciers melted away, Paleolithic man and Paleolithic industries disappeared. Perhaps after a period of great progress, the civilization simply declined, as has happened in later periods of history. On the other hand, a change of climate brought about changes in fauna and flora. In Europe the reindeer and other cold-loving animals retreated northward, and the dense oak forests, which now spread over Europe, harbored the stag, the wild ox, the boar—an entirely different group of animals. No doubt hunting was much more difficult. Perhaps, then, this was a period

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of great migrations, and Paleolithic men wandered away from their old haunts to begin life elsewhere as pioneers. Be that as it may, the remains of the culture of the period immediately following the Ice Age in Europe are depressing. They reveal a bare, meager life of scattered groups of people, many of which gained a livelihood by fishing rather than hunting.

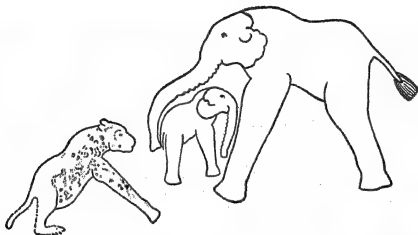


FIG. 7. NORTH AFRICAN ROCK DRAWING OF AN ELEPHANT PROTECTING HER YOUNG FROM THE ATTACK OF A TIGER

The elephant mother throws her trunk around the young one to ward off the tiger, which is preparing to spring. This situation could not have lasted more than a few seconds; but the North African hunter's eye caught the scene, and he probably made a quick sketch then, which he afterward enlarged on a great rock in southern Algiers. The occurrence of such drawings, often in the most inaccessible regions of the desert, is further proof that the Sahara Plateau was, many thousands of years ago, a fertile region enjoying plentiful rains. (After Frobenius and Obermaier)

Perhaps the most interesting of all are the remains of the pioneer life of Scandinavia, the southern part of which was probably free of the great northern ice sheet and open to settlement by man about 10,000 years ago.¹

While we postulate a period of migration for the men of post-glacial Europe, we have definite evidence that the men

¹ Baron Gerard de Geer, the Swedish geologist, and his pupils have counted the clay varves deposited by the ice sheet as it receded northward across Scandinavia at the end of the Ice Age. It is believed that each layer, or varve, represents the mud dropped each summer by the edge of the ice sheet. It is in this manner that the above estimate of 10,000 years has been obtained.

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south of the Mediterranean were forced to migrate from their plateau home and seek new habitation and new ways of living. At some time in the Ice Age the rains which had long watered North Africa began to fail. The reason for this diminished rainfall is not yet clearly understood. The decreasing rainfall caused the great Sahara Plateau slowly to dry up. Its parching vegetation gradually disappeared. During a period of many thousands of years the North African plateau was changed into the waterless desert which we know today.

At this period the Nile Valley was of the greatest value to these early hunters of the Sahara Plateau. The valley is a gorge, or canyon, nowhere more than thirty miles in width, with steep rock walls varying from a few hundred to a thousand feet in height. With its great river flowing down the gorge the valley offered the Stone Age hunters a new home with plenty of water. Therefore they shifted their dwellings down into the Nile gorge and made their homes along the banks of the river. Here the bottom of the great Nile trench, although it was as rainless as the desert, was watered by the river, which was plentifully fed from the rainy regions far south of the desert. Protected on both sides by practically rainless desert and unvisited by the ice or the cold of the north side of the Mediterranean, the great valley formed a *sheltered* home where the inhabitants were soon to advance from the stage of food-gathering to that of food-production.

CHAPTER II

THE FOOD-PRODUCERS AND THE NEOLITHIC AGE

The Nile-dwellers Become Food-producers

THE bottom of the Nile gorge was at first covered with deposits of silt and sand brought down by the current of the river, and not suited to support much vegetation. Probably as early as the outgoing Paleolithic Age the river had already begun to carry down from the highlands of Abyssinia a great deal of black soil. Each season, as the summer rains of the Abyssinian mountains swelled the upper Nile, its waters rose above the banks. As they spread out over the bottom of the Egyptian Nile trench, these muddy waters left a thin layer of black mud. This sediment became at last a deep floor of rich black soil. It formed a strip on each side of the river, following the wanderings of the winding Nile from right to left. At the present day this floor of black soil, including the two strips of it on both sides of the river, is rarely more than ten miles wide.

Living in the protected garden land thus formed, the men of the outgoing Paleolithic Age were able to advance to such improvements in manner of life that they are regarded as entering upon a new age which is generally called the Neolithic ("New Stone") Age. The Neolithic Age is, however, not a period which may be dated, for certain peoples in the Mediterranean area were developing the Neolithic manner of living when others in the same area were tentatively shaping out copper pins. For instance, the Neolithic Age drew to a close in Egypt and Iraq probably two thousand years before it did in northwestern Europe. In the study of the Neolithic culture, Egyptian remains permit an especially interesting reconstruction of this phase of prehistoric life.

Like the Sahara Plateau hunters, the animals which had so long inhabited the plateau found it necessary to take refuge in the Nile gorge in order to find food and water. The gorge was full of marshes and jungle, offering a welcome home to vast flocks of wild fowl as well as to great herds of huge animals like the hippopotamus and the elephant, which we have

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seen on the north side of Mediterranean. Especially important were several varieties of antelope, large wild cattle (*Bos primigenius*), sheep, goats, and asses, which likewise found refuge in this valley. There were as yet no tamed, or *domesticated*, animals anywhere; all these creatures were still wild. On the north side of the Mediterranean the hunters had already learned to trap even such large animals as the elephant. Down in the Nile gorge there was not so much room for these

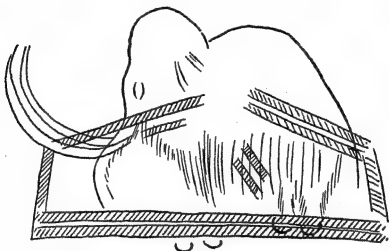


FIG. 8. CAVE PAINTING OF A MAMMOTH CAUGHT IN A TRAP OF LOGS IN SOUTHERN FRANCE

This painting shows the early stage of man's ability to take wild animals captive. At a later stage this practice led to domestication of animals.
(Drawing after Capitan-Breuil-Peyrony)

animals as they enjoyed in Europe or as they had once found on the plateau. Here, therefore, was a situation not common in Europe or Asia, for the animals were thrown into closer contact with man, who thus found it much easier to capture them.

A group of hunters would probably drive great herds of these wild creatures into the deep bays in the Nile Valley cliffs and, advancing upon them from the open side, would slaughter them. At length it occurred to the hunters to close off such a bay with a stockade having only one entrance, or even to build a stockade of four sides, or to set up an encircling net, having ways of egress on only one side. Wild

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game thus fenced in formed an exceedingly valuable source of food "on the hoof," and was always ready for use. After a

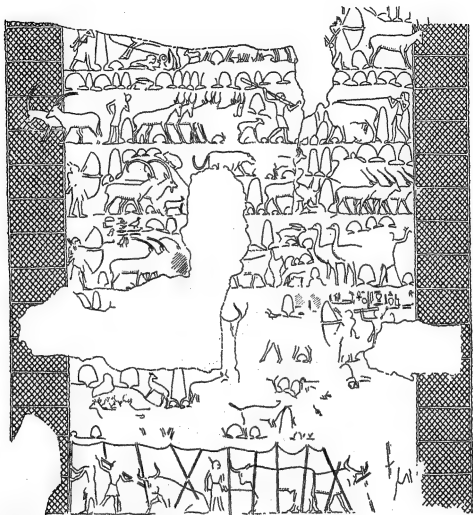


FIG. 9. ANCIENT EGYPTIAN RELIEF SHOWING A HUNTING INCLOSURE FILLED WITH ANIMALS

This scene was placed on the wall of a tomb of the Feudal Age. The breaks and gaps are caused by damage to the wall. The wild animals have been driven into an inclosure made of netting. We see the hunters engaged in closing up one end (at bottom edge) by poles connected by lengths of rope, but the far end has been destroyed. Four men, who are armed with bows and arrows, are evidently bent on killing some of the game for immediate use. Other men, in the first and second rows, are using lassos for capturing the animals alive. (Drawing after Newberry)

long time, some varieties of these captive animals lost their fear of man and gradually learned to live with him. It is in-

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interesting to see how the advancing desiccation of the Sahara thus brought man and the wild animals together, so that finally the ox, the sheep, the goat, and the donkey, all once

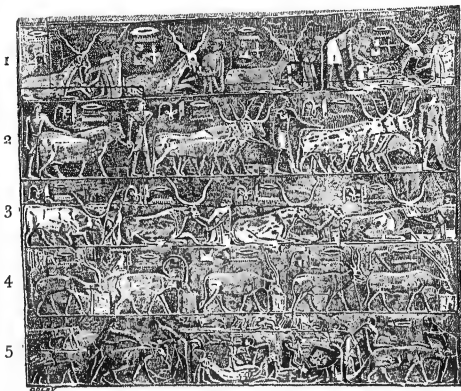


FIG. 10. STALL FEEDING OF SEMI-DOMESTICATED ANTELOPES AND HYENAS
ALONG WITH CATTLE

The wild creatures, which were taken alive out of the inclosures (Fig. 9), were then stall fed and partially if not wholly domesticated. Goats (1), gazelles (4, left end), addaxes (4, middle), oryxes (4, right end), ibexes (4, left), are all shown in the scene above, *eating at their mangers in stables* along with the large cattle (2). Many thousands of years before the date of this wall relief these large cattle had been domesticated, and they became the ancestors of our own domesticated cattle. One important detail in the picture indicates that the Egyptians had practiced selective cattle-breeding from a very early date. The hornless breed of cattle (2, left end) is secured, or at least perpetuated, by selective breeding. At the bottom (5) captive hyenas are being stuffed with food. Among all these animals the Egyptians completed the domestication of the goats and large cattle shown here (1, 2, and 3); the others (4) were but partially domesticated and are now found only in a wild state, especially the hyenas (5)

wild, gave up their free life and became what we call domestic animals, the servants of man.

Meanwhile the Nile-dwellers developed another new and

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lasting source of food. Probably for thousands of years the women had been accustomed to gather the seeds of certain wild grasses and had ground them up for food. Eventually some one found out that if these grasses were planted and watered, they would grow better and produce a greater yield of edible seed. Moreover, the seed could be sown near the temporary habitation and save the women the time and effort required in the search for wild grasses. Then these early agriculturalists apparently began to consider methods of storing the grain for use from one harvest to another. In the Fayum depression, on the west of the Nile Valley, there were recently discovered sixty-three pits which were probably dug in order to serve as granaries. A number of these pits had been smeared with wet mud and lined with straw. Some of the granaries contained small quantities of wheat and barley¹; in others were found also baskets, pots, and even the sickle used in harvesting.

The Nile-dwellers had thus found how to store their grain harvest and preserve the seeds for the next year's sowing. They had learned how to raise animals in stockades, and later how to save certain ones for breeding, or, as in the case of cattle, for milking. They had, therefore, become food-producers instead of food-gatherers. Being able to produce food *at home*, they found it less necessary to go out as hunters and kill wild animals. Groups of families began to form settlements, where it was possible to look after the flocks and herds and to water

¹ Wheat and barley were probably the first grains cultivated by man, but millet was also domesticated very early. It seems likely that oats and rye too were planted by prehistoric man. Much study has been given to the present distribution of wild barley and wild wheat in the effort to determine where the domestication of grain was first practiced. Paleobotanists and archeologists have concerned themselves also with the identification of the earliest cultivated varieties of wheat. The varieties of wheat used for making bread today have probably been developed by man through selection. There has been found no wild ancestor of our commonest cultivated bread wheat (*Triticum vulgare*). The species of wheat discovered in the early Egyptian granaries is Emmer (*Triticum dicoccum*). It has been found growing wild in various parts of the ancient world. At the present time Emmer is not generally cultivated as a bread wheat, but it is sometimes used in the manufacture of breakfast foods.

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the fields of grain. Finally most of the hunters became farmers and cattle-raisers, and the little settlements became more or less fixed habitations.

During this period the tools and weapons were still made of stone, but men had learned to use a gritty stone, such as sand-

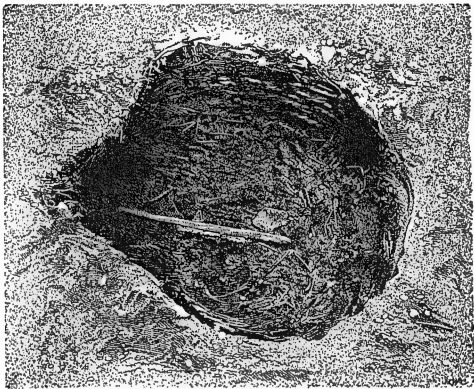


FIG. 11. STRAW-LINED GRANARY OF THE NEOLITHIC AGE, FOUND IN THE FAYUM, EGYPT

The wooden sickle (*A*) lying on the bottom of this granary is nearly two feet long. A dark glue-like mass holds the three saw-toothed pieces of flint in place to serve as a cutting edge of the sickle, and they remain fixed as firmly in their groove as they were on that day thousands of years ago when the Stone-Age Egyptian dropped the sickle in the pit and perhaps forgot all about it. (After Miss. G. Caton-Thompson)

stone, to sharpen or grind the edges of the tools. Not only were the flint implements greatly improved by this process, but an edge could be secured on other and more resilient stones than flint. Thus men might employ for their tools a tougher material and one in some instances more accessible than flint, for in many places good flint beds were scarce. The

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use of the grindstone was, therefore, one of the first great discoveries of the world, and one which is still used in as simple a form as in prehistoric times. It has been of enormous value to man, in that it has helped to make every man his own carpenter, so to speak. With these tools Neolithic men were able to cut down trees and do a certain amount of woodwork.

Various crafts were developed by the men of the early Nile farming communities. There were elephants which could be easily hunted, and the ivory was worked into vessels, spoons, and combs. The reeds which grew in the swamps along the Nile were plaited into mats and baskets. Dishes, plates, pots, and jars were made of baked plateau clay or Nile mud. This pottery was molded by hand, and yet the thinness and quality of the ware and the artistic effect of the beautifully rippled surfaces were never improved upon by the later Egyptian potters, even after they had invented the wheel to aid them. Some time previously the useful fibers of wild plants such as flax had been discovered, and the women had learned to cultivate the plants. Now they spun the fibers into thread, and wove the thread into linen for clothing.

All this happened so long ago that the remains of these early Nile settlements have been covered up under many feet of black soil, brought down since by the river. Nevertheless, scanty traces of several such habitations, on ground high enough to be above the reach of the Nile waters, have been discovered. The dead were buried along the margin of the black soil on the edge of the desert. A good many of the graves have been examined. The body was placed on a reed mat and surrounded by food jars, weapons, tools, and objects of personal adornment. Thus the deceased was apparently prepared for a life to come; and generally the face was turned, perhaps expectantly, toward the West.

In one such grave there was found a copper pin (Fig. 12), the oldest implement of metal ever discovered in archeological excavation. It is impossible to determine its date with any exactness, but it can hardly be much later than the fifth millennium B.C. This pin is therefore between six and seven thousand years old. It is interesting to follow in imagination the

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Egyptian who must have first discovered metal as he wandered into the peninsula of Sinai, where the oldest known copper mines are found. It may have been that in this vicinity, wishing to bank his camp fire with random stones, he happened to pick up for this purpose some pieces of copper ore lying about

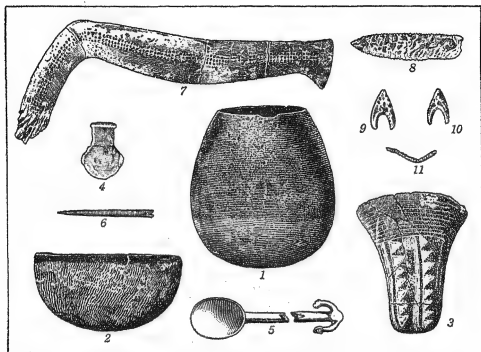


FIG. 12. GROUP OF ARTICLES FOUND IN AN EGYPTIAN CEMETERY OF THE LATE NEOLITHIC PERIOD

The burial equipment in this cemetery includes, among other things, pottery household vessels (1-3), ivory cosmetic jars (4) and spoons (5), bone needles (6), and weapons of wood or flint (7-10). Object 7 is a boomerang—probably the ancestor of the Australian boomerang. The copper pin (11) suggests the earliest, rather experimental use of metal. (Drawing after Brunton)

on the ground. The charcoal of his wood fire would mingle with the hot fragments of ore which he had piled around to shield the fire, and thus the ore would be “reduced,” as the miner says; that is, the copper in metallic form would be released from the lumps of ore. Next morning, as the Egyptian stirred the embers, he would discover in the ashes a few glittering globules now hardened into shining beads of metal. We can imagine how he would have picked them up and

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turned them admiringly as they glittered in the morning sunshine. Before long, as the experience was repeated, he discovered that these strange shining beads had come out of the pieces of stone around his fire.

Without knowing it this man stood at the dawning of a new era, the Age of Metal; and if this Egyptian wanderer could have seen it, the little bead of shining copper which he drew from the ashes might have reflected to him a marvelous vision of the future, with steel buildings, great bridges, huge factories roaring with the noise of thousands of machines of metal, and vast stretches of steel roads along which thunder hosts of rushing locomotives. For these things of our modern world, and all they signify, would never have come to pass but for the little bead of metal which the wondering Egyptian held in his hand for the first time on that eventful day so long ago. Since the discovery of fire many thousands of years earlier, men had made no conquest of the things of the earth which could compare in importance with the discovery of metal. This took place not later than the year 5000 B.C.—that is, at least about seven thousand years ago. But it was to be many centuries before the Egyptians learned how valuable this new material really was. They continued to use their stone tools and weapons and employed copper chiefly for ornaments, such as necklaces of copper beads worn by the women. After the discovery of copper, therefore, it was possibly nearly two thousand years before copper tools and weapons came into common use. During this long period and for some time after, the New Stone Age life went on, just as if metal had not been discovered.

The Neolithic Age in Europe

While Stone Age men on the south side of the Mediterranean were developing a more satisfactory manner of living, those on the north side were passing through a less pleasant experience. The Europeans of the post-glacial period led for a time a miserable existence in a terrible, strange world out of which they were being gradually crowded by great oak-forested wildernesses filled with animals which men had not

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yet learned how to hunt. As these men were still food-gatherers, they were probably often near starvation. Some of the people lived in caves, but many more lived along the rivers or by the seashore where they could catch fish. The fish diet was varied by nuts and berries, and now and then they were able to kill a small animal. The flint industry was very poor, and there was no art. It seems evident that certain foreign, more progressive influences must have reached Europe and changed the people from their primitive ways of living. Some of these influences spread no doubt from North Africa. It is not impossible that groups of the Nile-dwellers, with more roving tendencies than others, wandered across North Africa and passed, probably by way of Gibraltar, into Europe. If this occurred, they brought with them, of course, the ideas and customs of a food-producing people.

Other progressive influences probably came into Europe from the east. It was especially beside rivers and watercourses, where there were fertile soil and extensive pastures, that the early communities of food-producers in the Neolithic Age located their settlements. The most important of the European river valleys in this age was that of the Danubé. In its lower courses the valley expands into what are now the wide and productive plains of Hungary. This region of the lower Danube extends down toward western Asia Minor, through which the Neolithic life of Western Asia might have passed over into eastern Europe, bringing with it cattle-breeding and the cultivation of grain. It is probable that the wide grain-fields and extensive pastures of Hungary supported the first large farming communities of Europe, as increasing numbers of men abandoned the hunting life and settled down in fixed dwellings. From the farmers of the Danube pastoral and agricultural life passed up the great river into the heart of Europe. The remains of the Neolithic settlements which at this time spread westward from Hungary disclose great improvements in the manner of living.

The first houses of these settlements were probably only wattle huts daubed with mud or thatched with rushes. Improved, ground-edged stone tools, however, soon made pos-

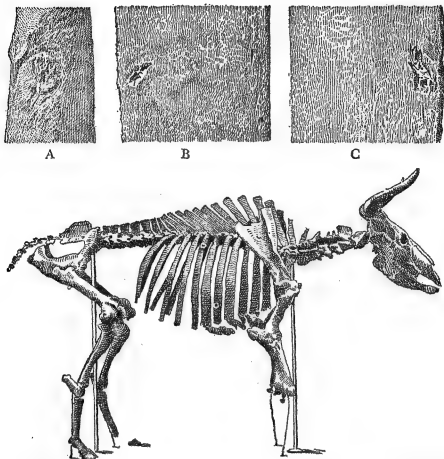


FIG. 13. SKELETON OF A WILD BULL BEARING THE MARKS OF THE HUNTER'S ARROWS WHICH KILLED HIM IN THE DANISH FORESTS, PROBABLY SOME NINE THOUSAND YEARS AGO

A Late Stone-Age hunter shot him in the back near the spine (see upper white ring on skeleton). The wound healed, leaving a scar on the rib (A, above). Later another hunter shot him, and this time several arrows pierced his vitals. One of them, however, struck a rib (see lower white ring on skeleton) and broke off. Both sides of this wound, still unhealed, with the broken flint arrowhead still filling it, are shown above in B and C. While the wounded bull was trying to swim across a neighboring lake he died and his body sank to the bottom, and the pursuing hunter, on reaching the lake, found no trace of him. In the course of thousands of years the lake slowly filled up, and water 10 feet deep was followed by dry peat of the same depth, covering the skeleton of the bull. Here he was found in 1905, and lying with him were found the flint arrowheads that had killed him. His skeleton, still bearing the marks of the flint arrowheads (A, B, C), was removed and set up in the museum at Copenhagen

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sible the construction of wooden houses. If we examine the equipment of Neolithic workmen we find that they had a list of tools almost as complete as that of the modern carpenter. Besides the ax, they had chisels, knives, drills, saws, and grind-stones, made mostly of flint, but sometimes of other hard stones. They had learned also either to attach a wooden handle by lashings around the ax-head, or to fit the ax-head into a deer-horn handle, or even to bore a hole in the ax-head and insert a handle. These tools, as found today, often display a polish due to the wear which they have undergone in the hands of the user.

It is a mistake to suppose that a man could not do good and rapid work with such stone tools. In a recent experiment in Denmark a modern mechanic was given a stone ax, and although not accustomed to the use of stone tools, he was able, in ten working-hours, to cut down twenty-six pine trees eight inches in thickness and hew them into logs. Then the *entire work of hewing out the planks and timbers and building a house was done by one mechanic with stone tools in eighty-one days*. It was therefore quite possible for the men of the New Stone Age to build comfortable dwellings and to attain a manner of living far above that of savages.

The most plentiful traces of the earliest wooden dwellings in Europe are to be found in Switzerland. Here in the Neolithic period groups of families built their villages of wooden houses upon platforms stretching in long lines along the shores of the Swiss lakes.¹ These platforms were supported by piles driven into the ground. Such villages, or groups of *pile-dwell-*

¹ The remains of the Swiss lake-villages were first disclosed in 1854 when, after an unusually dry season, the Swiss lakes fell to a very low level. It has now been shown that this low level of the water was the original level when the villages were built. The villages, therefore, stood on the dry land *beside* the lake, and not over the water, as was formerly believed. In the course of thousands of years the water of the Swiss lakes has risen and covered the old shores, including the remains of the pile-villages, and has thus produced the incorrect impression that they were built over the water, and that the piles had been driven into the lake bottom. Among the projecting piles have been found great quantities of tools, household furnishings and implements; also dugouts and fish nets, wheat, barley, bones of domestic animals, woven flax, and the like.

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ings, are commonly called *lake-villages*. In a few cases they finally grew to be quite large. At Wangen not less than fifty thousand piles were driven into the ground for the support of the village.

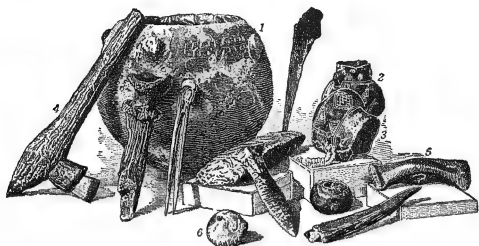


FIG. 14. OBJECTS FOUND IN SWISS LAKE-DWELLINGS

Three important inventions made during the Neolithic period are here shown: *first*, pottery jars, like 2 and 3, with rude decorations—the oldest baked clay in Europe—and 1, a large kettle in which the lake-dwellers' food was cooked; *second*, ground-edged tools like 4, a stone chisel mounted in a deerhorn handle like a hatchet, or 5, a stone ax pierced with a hole for the ax handle; and *third*, weaving, as shown by 6, a spinning "whorl" of baked clay, the earliest spinning wheel. When suspended by a rough thread of flax eighteen to twenty inches long, it was given a whirl which made it spin in the air like a top, thus rapidly twisting the thread by which it was hanging. The thread, when sufficiently twisted, was wound up, and another length of eighteen to twenty inches was drawn out from the unspun flax to be similarly twisted. One of these earliest spinning wheels has been found in the Swiss lakes, with flaxen thread still attached. (From photograph loaned by Professor Hoernes)

The lake-villagers lived a life of peace and prosperity. Their houses were comfortable shelters, and they were supplied with wooden furniture and implements, wooden pitchers and spoons, besides pottery dishes, bowls, and jars. Although their pottery was roughly made without the use of the potter's wheel and unevenly burned without an oven, nevertheless pottery vessels made the household life much easier and more convenient than it had formerly been. The waters near the house teemed with fish, which were caught with bone hooks

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or in nets of linen cord made from the flax which the lake-villagers were already cultivating.

The hillsides looking down upon the lake-villages were green with fields of wheat, barley, and millet. This new source of food was a plentiful one; more than a hundred bushels of grain were found by the excavators on the lake bottom under the vanished lake-village of Wangen. Up the hillside now stretched also the lake-dwellers' little fields of flax beside the growing grain. The women sat spinning before the doorways, and the rough skin clothing of their ancestors had given way to garments of linen.

These fields were an additional reason for having settled homes in one place. It was necessary for the villagers to remain near the little fields where their women had hoed the ground. The grain had to be cared for and harvested when it ripened. At first no one owned these fields, for no one had ever heard of *owning* land; but after a time each household gradually gained the right to cultivate a particular field, and finally they came to set up a claim to it. Thus arose the ownership of land. It was to be a frequent cause of trouble in the future life of men, and out of it came the long struggle between the rich and the poor—a struggle which was earlier unknown, when land was free to all. By this time a large part of the New Stone Age Europeans had begun to have fixed homes and were following a settled agricultural life in and around villages.

On the other hand, the possession of grass-eating animals, feeding on the grasslands, created a class of men who did not lead a settled life. The pasturage was not everywhere plentiful enough to permit keeping the cattle always in one place. At times the cattle-keepers were obliged to seek pasturage somewhere else, and thus came to follow a roving life, leading their flocks and herds about and pasturing them wherever the grasslands offered food. While the farmers remained settled on their rich farm lands, the nomad peoples took possession of the grasslands which stretched from the Danube eastward along the north side of the Black Sea and thence far

THE FOOD-PRODUCERS AND THE NEOLITHIC AGE

over into Asia. Their life always remained ruder and less civilized than the settled life of the villages.

Thus grain and cattle created two methods of life side by side—the settled, agricultural life of grain-raising, and the wandering, nomad life of cattle-breeding. It is important to understand these two classes of people, because the *unsettled* nomad population periodically became too numerous to find sufficient pasturage on the grasslands. At such times they overflowed, and thus overwhelmed, the towns and agricultural settlements. We shall see later Europe repeatedly invaded by the hordes of nomads pushing in from the eastern grasslands.

The *settled* communities of the Neolithic period at last began to leave behind them something more than fragile wooden houses and wattle huts. Toward the close of this age the more powerful chiefs in the large settlements learned to erect tombs built of enormous blocks of stone. They are still found fringing the western coast of Europe from the Mediterranean along the coast of Spain to the southern Scandinavian shores. There are at the present day no less than thirty-four hundred stone tombs of this age, some of considerable size, on the Danish island of Seeland alone. In France they exist in vast numbers and imposing size, and likewise in England. The enormous blocks in some of these structures were mostly left in the rough; but if cut at all, it was done with stone chisels. Such structures are not of masonry, that is, of smoothly cut stone laid with mortar. They cannot be called works of architecture—a thing which did not as yet exist in Europe.

When we look at these monuments of the Neolithic Age, they prove to us the existence of the earliest towns in Europe; for near every great group of stone tombs there was a town where the people lived who built the tombs. The remains of some of these towns have been discovered, and they have been cleared of the earth covering them. They show us that men were learning to live together in larger numbers and to work together on a large scale. It required power over men and successful management of them to raise the earth walls of such a town, to drive fifty thousand piles supporting the lake-village at Wangen (Switzerland), or to move great blocks

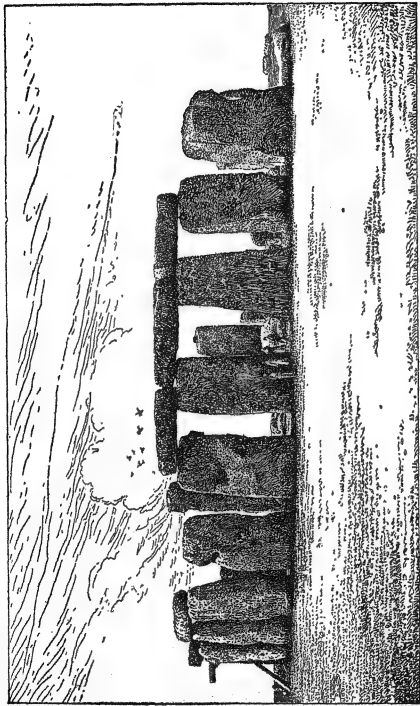


FIG. 15. GREAT STONE CIRCLE AT STONEHENGE, ENGLAND

The circle is about one hundred feet across, and a long avenue connecting it with the neighboring Stone-Age town is still traceable. It is thought by some that Stonehenge marks the burial place of certain Stone-Age chieftains

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of stone for building the chieftain's tomb. In these works we see the beginnings of government organized under a leader. We may call such a government a *state*, and many little states, each made up of an earth-walled town with its surrounding fields, and each under a chieftain, grew up in Europe during the Neolithic period. Out of such beginnings nations were later to grow.

Furthermore, the stone structures furnish us very interesting glimpses of the life of the Neolithic towns. Some of them sug-

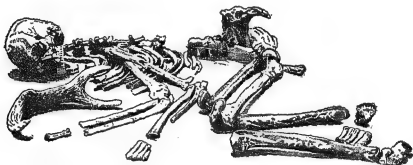


FIG. 16. SKELETON OF A MINER OF THE LATE STONE AGE

The skeleton of this ancient miner was found lying on the floor of a flint mine in Belgium, under the rocks which had caved in and crushed him. Before him, just as it dropped from his hands at the instant of the cave-in, lies the double-pointed pick of deerhorn with which he was loosening the lumps of flint from their chalk bed

gest to us whole communities coming out from the towns on feast days and marching to such places as the huge stone circle at Stonehenge. It has been thought that here they held contests and athletic games in honor of the dead chief buried within the stone circles. Festival processions may have once marched down the long avenues, marked out by mighty stones. Today, silent and forsaken, they stretch for miles across the fields of modern farmers, to remind us of forgotten human joys, of ancient customs, and of beliefs long revered by the vanished peoples of Stone Age Europe.

While such monuments are relics of religious, and perhaps social, activities, other remains reveal the people at their work. Men were beginning to adopt trades; for example, some men were probably woodworkers, others were potters, and still

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others were already miners. These early miners burrowed far into the earth in order to reach the finest deposits of flint for their stone tools. In the underground tunnels of the ancient flint-mines at Brandon, England, eighty worn picks of deer-horn were found in recent times. At one place the roof had caved in, cutting off a gallery of the mine. Here, behind the fallen rocks, archeologists found two more deer-horn picks. These bore a coat of chalk dust in which were still visible the marks of the workmen's fingers, left there as they last laid down these tools thousands of years ago.

Exchange and traffic between the villages already existed. Indeed, primitive commerce sometimes carried things far and wide. An outstanding example of this was an especially fine variety of French flint, found scattered today in many parts of Europe and recognizable by its color. The amber gathered on the shores of the Baltic was already passing from hand to hand southward to the Mediterranean. Stone implements found on the islands around Europe show that men of this age lived there, and they must have had boats sufficiently strong to carry them thither. Several of the dugouts of the lake-dwellers have been found lying on the lake bottom among the piles, but vessels with *sails* had not yet been invented in Europe. The business of such an age was of course very simple. There were no metals and no money. Buying and selling were only exchange of one kind of wares for another kind. In all Europe there was no writing, nor was a system of writing ever invented on the *continent* of Europe.

But the intercourse between these earliest villages of Europe was not always peaceful. The earthen walls and wooden stockades with which the towns were protected show us that the chieftain's war-horn must often have summoned the people to repel the enemy. Grim relics of these earliest wars of Europe still survive. A skull taken out of a tomb of this age in Sweden contains a flint arrow-head still sticking in one eyehole, while in France more than one human bone has been found with a flint arrow-head driven deep into it. A stone coffin found in a Scottish cairn contained the body of a man of huge size, with one arm almost severed from the shoulder

THE FOOD-PRODUCERS AND THE NEOLITHIC AGE

by the stroke of a stone ax. A fragment of stone broken out of the ax-blade still remained in the gashed arm bone.

Such was the life of Neolithic men on the north side of the Mediterranean near the close of this period, about three thousand years before Christ. After changing from the hunting life to the settled life beside their grain-fields and pastures, they made no great progress. They were still without *writing* for making the records of business and government; they continued to be without metals¹ from which tools might be manufactured, and industries further developed thereby; and they had no *sailing-ships* in which to carry on commerce. Without these things mankind could progress no farther.

The Quarter of the Globe Where Civilization Grew Up and Developed

Thus far we have watched the developing life of early men in the Mediterranean area, with especial attention to the regions on the north and south where artifacts have been found for a long time and studied extensively by modern archeologists. A constantly growing corpus of prehistorical material bears evidence, however, that early men lived in all the lands surrounding the great sea. Together with this fringe of inhabited lands around it, the Mediterranean therefore formed the center of advancing life, beginning with the earliest appearance of man. Let us examine as a whole the quarter of the globe in which the Mediterranean occupies such an important part. The early civilized life on the African side of the Mediterranean was limited to a narrow strip along the shore (because of the Sahara Desert lying behind) and a narrow line extending southward along the Nile. On the European side of the Mediterranean civilized men moved gradually northward and in time reached the Baltic, the North Sea, and

¹ Metal was introduced in southeastern Europe about 3000 B.C. and passed like a slow wave, moving gradually westward and northward across Europe. It probably did not reach Britain until about 2000 B.C. Hence we have included the great stone monuments of western Europe in our survey of Stone Age Europe. They were erected long after *southeastern* Europe had received metal, but before metal came into common use in *western* Europe.

WHERE CIVILIZATION DEVELOPED

the British Isles. At the Asiatic end of the great sea civilized life developed far inland, and eventually eastward to India and China.

Beginning with the Mediterranean, then, we find that its three coast lines, southern, northern, and eastern, together with the lands back of them, constituted a world where the life of early men was developing on three continents. Viewed as one whole, these regions form a triangle, including a large part of the northwestern quarter of the Eastern Hemisphere. This triangle, which has been called the Great Northwest Quadrant, has as its base line the southern borders of the desert in Africa and Asia, or, roughly, the twentieth parallel of north latitude. Its eastern boundary is a north-and-south line roughly coinciding with the Ural Mountains, and forming the sixtieth meridian of eastern longitude. West of this meridian and north of the twentieth parallel the Great Northwest Quadrant extends to the Atlantic and Arctic Oceans, which form its boundaries on west and north. In this enormous triangle developed the civilization which Europe and America of today have inherited.

Geographically the vast quadrant consists of three zones lying in east-and-west lines. There is first the long Highland Zone, to which the mountains belong, stretching along the northern side of the Mediterranean and then eastward into the heart of Asia beyond the eastern boundary of our triangle. On the northern side of the Highland Zone there are *Northern Flatlands*, which likewise stretch eastward and deep into Asia. On the south side of the Highland Zone there are *Southern Flatlands*, which are largely occupied at the west end by the basin of the Mediterranean. It is important to observe that most of the Southern Flatlands is desert, extending from North Africa eastward across the Red Sea and far into Asia.

The peoples of the Great Northwest Quadrant, as far back as we know anything about prehistoric men, have all been members of the white race. They differ markedly, however, in certain physical characteristics. On the Northern Flatlands, we find fair-haired long-headed people, such as the Scandinavians, who are sometimes called Nordics. Their neighbors on the

THE FOOD-PRODUCERS AND THE NEOLITHIC AGE

south are round-headed men dwelling in the Highland Zone, and hence are often called Alpine or Armenoid peoples. On the Southern Flatlands live dark-haired men with long heads, now commonly known as the Mediterranean race. These three types have peopled the whole of the Northwest Quadrant, and the ancestors of the population now living there were the creators of the civilization we have inherited.

If we look outside of the Great Northwest Quadrant we find in the neighboring territory only two other clearly distinguished races—the Mongoloids on the east and the Negroes on the south. These peoples occupy an important place in the modern world, but apparently they did not contribute directly to early civilization in the Northwest Quadrant. The isolated plateaus of inner Asia, commonly called High Asia, were early inhabited by the Mongols, or Mongoloids, a race of men with straight, black, wiry hair, round heads, almost beardless faces, and yellow skin. Of this race the Chinese developed an impressive civilization.¹ The migrations of the yellow men out of High Asia finally carried them in all directions, but they did not reach the Northwest Quadrant until civilization there was already highly developed. Groups of Asiatic wanderers probably related to the Mongoloids migrated to the far northeast of Asia, and it is thought that they finally crossed to Alaska. This suggests that they may have wandered farther into America and so became the ancestors of the North American Indians.

On the south of the Northwest Quadrant lay the teeming black world of Africa, as it does today. It was separated from the white race by the broad stretch of the Sahara Desert. The valley of the Nile was the only road leading across the Sahara from south to north. Sometimes the blacks of inner Africa did wander along this road into Egypt, but they came only in small groups. Thus cut off by the desert barrier and living by

¹ Recent Paleolithic and Neolithic finds in China make it evident that certain essentials in Chinese culture originated in the *prehistoric* period. With respect to the *historic* period, Dr. H. G. Creel in his *The Birth of China* (London, 1936), p. 53, says, "From the archaeological and scientific point of view the curtain rises on Chinese history with the Shang people living at Anyang in the fourteenth century B.C."

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themselves, they remained uninfluenced by civilization from the north, nor did they contribute appreciably to this civilization.

We shall therefore confine ourselves to the rise of civilization in the Northwest Quadrant. We have seen that the men of the Neolithic Age lacked principally writing, metals, and

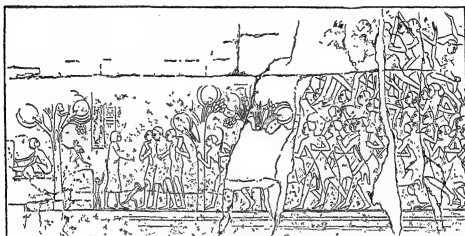


FIG. 17. THE EARLIEST KNOWN REPRESENTATION OF NEGRO LIFE
(THIRTEENTH CENTURY B.C.)

Under a palm at the left a Negro woman sits stirring an earthen pot over a fire, preparing food. Meanwhile a great commotion has arisen. A large group of defeated soldiers (on the right), fleeing before the wrath of the Egyptian king, have burst into camp. At the left, somewhat in advance of the main group, a wounded soldier is supported by two comrades who lead him to the arms of his wife and two children approaching from the left. In the palm tree beside them a monkey hops up and down and chatters frenziedly at the confusion, and an excited child rushes past to tell the cook of the misfortune which has befallen them. This relief is found in a temple of Ramses II, thus dating to the thirteenth century B.C. The gaps in the above picture are due to the breakages in the ancient original relief

sailing-ships, among those things necessary to progress toward a less primitive manner of living. These things were discovered or invented not in Europe but on the other side of the Mediterranean, in Egypt and Western Asia—in lands which we now call the Near East.¹ Like a great rough horseshoe, with its

¹ The term "Far East" is used today to include China, India, and the Pacific islands, especially Japan. The term "Near East" is now the most convenient name for the lands grouped around the eastern end of the Mediterranean.

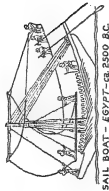
THE FOOD-PRODUCERS AND THE NEOLITHIC AGE

opening toward the west, and much thickened in the middle, the lands of the Near East are folded around the east end of the Mediterranean, with Asia Minor on the north, and north-east Africa on the South. In the Near East, beginning before 4000 B.C. and during the thousand years from 4000 to 3000 B.C., men slowly built up a high civilization, forming the beginning of the Historic Age, or the age beginning when written documents were first produced by men—documents which tell us in written words something of man's life and career.

PART II

THE ORIGINS AND EARLY HISTORY OF CIVILIZATION IN THE ANCIENT NEAR EAST

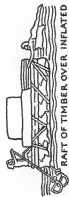
REED BOAT
EGYPT—
ca. 3000 B.C.



SAIL BOAT—EGYPT—ca. 2500 B.C.



SKIN BOAT
ASSYRIA
Before 700 B.C.



RAFT OF TIMBER OVER INFLATED
SKINS — ASSYRIA Before 700 B.C.



SAIL BOAT
PHOENICIA
ca. FIRST
CENTURY A.D.



SUMER
3000 B.C.



EGYPT
1500 B.C.



INDUS VALLEY
Before 2500 B.C.



ASSYRIA
900 B.C.

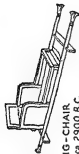


NORTHERN
PEOPLES
1200 B.C.



PERSIA
500 B.C.

TYPES OF WHEELS



CARRYING-CHAIR
EGYPT — ca. 2900 B.C.



PALANQUIN
ON DONKEYS
EGYPT
ca. 2500 B.C.



SLEDGE
SUMER
ca. 3000 B.C.



FOUR-WHEELED CHARIOT
SUMER — ca. 3000 B.C.



PERSIA
ca. 500 B.C.
TWO-WHEELED CHARIOT



EGYPTIAN BOAT OF WOOD, 2000 B.C.
DOVETAILS OF HULL CONSTRUCTION,
SEEN FROM ABOVE

TRANSPORTATION IN THE ANCIENT NEAR EAST

CHAPTER III

THE STORY OF EGYPT: EARLIEST CIVILIZATION AND THE PYRAMID AGE

The Beginnings of Government in Egypt

AS WE return to the progress of human development in the early Near East we resume it in Egypt. We remember how we followed the hunters of North Africa from the slowly desiccating plateau down into the Nile Valley, and we recall how these hunters were beginning the transition to a settled life of cattle-breeding and agriculture. As fields of grain cannot grow without water, these early Egyptians, living in a country without rain, were forced to devise a simple machine for lifting water from the river or from canals filled by the river. In this way the irrigation trenches were kept full of water until the grain ripened. The Egyptians of today continue to use an ancient water-lifting machine, and our ancestors inherited it in the well-sweep once common in New England.

The black soil brought down by the Nile from Abyssinia was very fertile. Each summer the Nile rose above its banks, spread far over the flats, and stayed there long enough to deposit a thin layer of sediment. In time this sediment filled a large bay at the mouth of the river and formed what we now call the Nile Delta. At the present day the Delta and the valley above, as far as the First Cataract, contain together over twelve thousand square miles of cultivable soil—about the area of Massachusetts and Connecticut. In the Neolithic Age, however, the area which could be cultivated must have been much smaller; for at that time the valley was still largely occupied by extensive marshes, and only here and there between the marshes was it possible to plant and harvest a crop. Furthermore, the fierce and rapid current of the river in the valley made the shores there less easy to cultivate. But in the Delta, where the river branched out into smaller streams with slower currents, the marshes were easier to reclaim for cultivation.

Gradually the people of the Delta outstripped the dwellers on the upper river and advanced more rapidly toward civilized life. This progress in the Delta led to regulations of com-

THE STORY OF EGYPT

munity life, which finally became government. It grew up very slowly as the community felt the need of a leader.

The people might first need him to help them defend themselves against their enemies in war, but the leadership of such a warrior chieftain did not always result in very good government. Much more useful to the community was a leader to control and guide the men who were appointed to look after the irrigation trenches and canals.

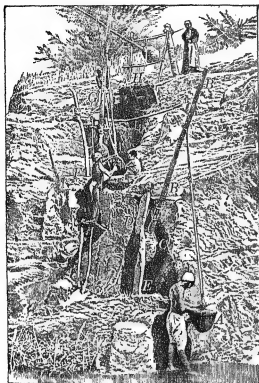


FIG. 18. AN EGYPTIAN SHADOOF, THE OLDEST OF WELL SWEEPS, IRRIGATING THE FIELDS

The man below stands in the water, holding his leather bucket (A). The pole (B) of the sweep is above him, with a large ball of dried Nile mud on its lower end (C) as a lifting weight, or counterpoise, seen just behind the supporting post (D). This man lifts the water into a mud basin (E). A second man (in the middle) lifts it from this first basin (E) to a second basin (F), into which he is just emptying his bucket. A third man (G) lifts the water from the middle basin (F) to the uppermost basin (H) on the top of the bank, where it runs off to the left into trenches spreading over the fields. The low water makes necessary three successive lifts (to E, to F, to H), continued without ceasing, night and day, for one hundred days

The overflow of the river (commonly called the inundation) often clogged the canals with mud, so that the men of a group of villages would go forth together to dig out and clear the canal. They knew that if they did not do so there would be no water for the grain-fields, no harvest, and finally no bread. Such work on the canals required a leader who was more than a mere fighter, and eventually some intelligent and courageous man seized control in each group of Delta villages, probably over seven thousand years ago. The

THE BEGINNINGS OF GOVERNMENT IN EGYPT

leader of one of these groups of Delta villages would in time become a local chieftain who controlled the irrigation works in a large district. To him the people of the district were obliged to carry every season a share of the grain or flax which they gathered from their fields. If they did not do so, the supply of water in the irrigation trenches for their fields would be stopped by the chieftain, and they would receive an unpleasant visit from him or his men, demanding instant payment. These were the earliest taxes, and the chieftain's control of the canals and collection of such taxes formed the earliest government.

Many such local chieftains must have arisen in the Delta. Finally one of them conquered the rival chieftains in the other districts and united all the Delta into a kingdom which we call Lower Egypt (for it was *lower* on the river). Later there arose another kingdom, extending up the valley far south of the Delta. It included the Nile Valley itself, from the southern apex of the Delta southward to the region of the First Cataract. This stretch of over five hundred miles of the valley proper we call Upper Egypt.

The rule of these two kingdoms, Upper Egypt and Lower Egypt, probably reached back nearly seven thousand years—that is, almost to the year 5000 B.C. It presumably lasted for some centuries. In many particulars the life must have resembled that of the agricultural Indians in pre-Columbian days. In each kingdom there was a capital where the king lived, but the royal buildings were too fragile to last, and no traces of them have ever been found. The people lived along the river in villages, consisting of a group of huts and little houses built of wattle, very much as in the earlier period. Such dwellings have, of course, all disappeared, but on the edge of the desert behind

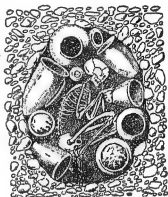


FIG. 19. LOOKING DOWN INTO THE GRAVE OF AN EGYPTIAN OF THE FIRST UNION

An oval pit four or five feet deep. The body is surrounded by pottery jars which once contained food and drink

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each village the people buried their dead in shallow pit-graves. The excavation of those graves shows that metal was still very little used. In the first place, the art of mining was unknown and hence not a great quantity of metal was to be had. Moreover, there was no one who knew very much about working metal. As long as men continued to use metal only for making a few tiny implements, such as pins or an occasional small chisel, or beads for the women, metal played an unimportant part in daily life. Stone tools and weapons, therefore, continued to be universally employed.

There must have been considerable traffic between the two kingdoms, for they were, of course, connected by the Nile. There were times, too, when relations were not amicable. Finally, probably in the forty-third century B.C., a powerful king of Lower Egypt, whose name we do not know, marched southward out of the Delta and conquered the king of Upper Egypt.

As a matter of convenience, we shall call this first kingdom of Upper and Lower Egypt the First Union, although this was not its ancient name. It probably lasted several centuries, and during that time of course had many kings. They lived at Heliopolis ("Sun City"), which thus became the first capital of united Egypt. It was situated midway between the two kingdoms, and it always remained the most sacred and influential of Egyptian cities.

Earliest Egyptian Civilization Based on Agriculture

During the First Union, Heliopolis became the center of a prosperous life—more prosperous than had ever been possible before, because the people were creating a greater quantity of portable wealth than they had ever yet possessed. That wealth was grain, which poured into the capital from the largest fields that man had ever seen—fields that covered great portions of Egypt and could be worked because of the invention of the plow. Formerly the fields had been cultivated by hand with the hoe. To plow a field with a wooden hoe was a slow and laborious piece of work, and the slowness of the work

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limited the amount of land which could be cultivated. Only very small fields of grain were possible. Finally it had occurred to some clever Egyptian that he might lengthen the handle of his hoe, and, if he made it long enough, the end of it could be fastened to a yoke resting on the foreheads of two oxen. By attaching handles to the new machine the plowman could then guide it across his fields as the oxen dragged it along before him. Thus *hoe culture* was transformed into *plow culture*.

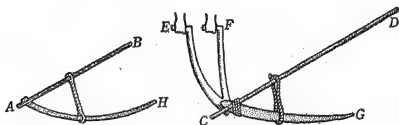


FIG. 20. AN EGYPTIAN WOODEN HOE (LEFT) AND THE WOODEN PLOW (RIGHT) WHICH GREW OUT OF IT

The handle of the hoe (A-B) has been lengthened to become the beam of the plow (C-D). The upper end (D) of the beam was fastened to a yoke which was attached to the horns of the two oxen. To guide the new ox-drawn hoe, handles for the plowman's use (E and F) were necessary. These were attached at the point where the beam (C-D) and plowshare (C-G, once the hoe blade A-H) met. The first plows had only one handle, affixed to one side of the juncture of beam and share, but the Egyptians soon discovered the advantage of attaching two handles

The invention of the first agricultural machinery marked a new epoch, for with the plow man was able to utilize animal power, or energy other than merely human strength. Much greater power was thus for the first time made available for the work of cultivating the fields. This meant as much for the increase of food among ancient men as the introduction of improved agricultural machinery has meant in the wealth and progress of modern nations, especially on the American continents. Just as the United States, for example, grew by expansion of its farming land, so Egypt expanded during the First Union. The increased wealth thus gained by both the government and the people was a strong influence in raising the Egyptians toward civilization. This annual income in grain

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meant not only increased wealth, but provided also a form of *portable* wealth with which loans could be made, taxes could be paid, and business debts settled. In an age before there was any money this new and portable form of wealth made an enormous difference.

The large increase in the extent of the cultivated fields made the central government of the whole nation more impor-

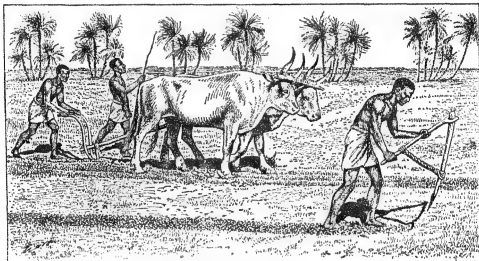


FIG. 21. PLOW CULTURE AS COMPARED WITH THE OLDER AND MUCH SLOWER PROCESS OF HOE CULTURE

This drawing, based on ancient Egyptian reliefs, shows us the immense advantage in power and speed gained by the man who yoked his oxen to the plow and plowed an acre in a day, while the man who bent all day over the hoe could not possibly do more than scratch the surface of a quarter of an acre. The plow thus multiplied by at least four the amount of acreage that might be put under cultivation. The total harvest of the entire country, therefore, was likewise multiplied by four; the people had four times as much grain as before; the king received four times as much taxes

tant than ever, for the enlarged area of cultivation required an immensely increased amount of water for irrigating the fields. The little local systems of canals were united into one extensive national system, which was controlled from the capital. The irrigation administration thus centralized in the hands of the king's officials was without doubt the first great administrative machine in the history of human government.

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It must have had much influence on the operations of the government and aided in its development.

The important place occupied by agriculture in the government of the Egyptians during the First Union may be seen in the names which were adopted for the different seasons of the year. There were three seasons in their earliest calendar, and they bore the names "Inundation," "Coming Forth" (meaning the coming forth of the fields from the inundation that had covered them), and "Harvest." Only a people essentially made up of *irrigating farmers* would have divided the year into three seasons, named from the inundation and the condition of the cultivated fields.

Each of these three seasons was four months long, and the month was measured by the moon. Indeed, long before the First Union the Egyptians, like all early peoples, found the moon a convenient time-measurer. The American Indians used to measure time by moons (that is, the period from one new moon to the next), and they would speak of a journey of sixty days as a journey of two moons, meaning two months. Unfortunately, the moon-month is not constant in length, but varies from twenty-nine to thirty days. At the same time the length of the *year* is a *solar* matter and therefore the lunar month does not evenly divide the three hundred and sixty-five days of the year. As a fractional part of the year, however, the moon-month was near enough to a twelfth so that the year could be regarded as roughly containing twelve months. The inaccuracy of the division was of course very evident and very inconvenient.

The Egyptians showed themselves much more practical in removing this inconvenience than did their neighbors in other ancient lands. Probably long before the First Union they had discovered the number of days in a year, although they did not at first know that their reckoning of three hundred and sixty-five days overlooked a fraction of about a quarter of a day. For dividing the year more satisfactorily they determined that they would abandon the inconvenient moon-month. They decided to have a calendar year of twelve months as before, but each of these twelve months under the new calendar was

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to have thirty days. These twelve thirty-day months thus formed a short year of three hundred and sixty days, to which the new calendar added five feast days, a kind of holiday period five days long at the end of the year. This gave them a calendar year of three hundred and sixty-five days as before.

By means of astronomy it is possible to compute the date when this calendar year was invented and introduced as 4236 B.C.¹ This invention and its introduction in the forty-third century B.C., form the earliest dated event in human history. Moreover this earliest Egyptian calendar is the very one which has descended to us after more than six thousand years—with inconvenient alterations in the lengths of the months unfortunately introduced by the Romans.

The months in this calendar were numbered and thus furnished a very practical means of identifying any particular *month*. It did not, however, furnish any way of identifying a particular *year*. If we are dealing only with the *current* year, we may date a letter or a business agreement by simply mentioning the month and the day of the month. But if we are dealing with events in another year, or we wish to refer to an occurrence which happened several years earlier, the *year* must in some way be identified. Our convenient system of an era beginning with a great event, like the birth of Christ, and *numbering* the years from it, was still unknown. In order to have some means of identifying a particular year when it was long past, the Egyptians gave each year a name after some important event which had happened in it. This method is still in use among the North American Indians and even among ourselves, as people in Chicago say "the year of the great fire," or as we may date events from "the year of the Armistice." The earliest written monuments of Egypt were thus dated by means of named years.

Lists of year-names then began to be kept. As each year-name usually mentioned some great event, a list of this kind was thus an enumeration of such events; and becomes for the

¹ The date 4241 B.C., formerly calculated for this event, contained a small error in the factors used. After rectifying this error the calculation gives 4236 B.C., as the correct year.

EARLIEST EGYPTIAN CIVILIZATION

modern historian a very instructive record of important happenings. The earliest year-list of this sort in human history now surviving, called the Palermo Stone (because it is preserved in the museum at Palermo, Sicily), began about 3400 B.C. and contained, when complete, the names of some seven hundred years, ending about 2700 B.C. Later the Egyptians found it more convenient to number the years of each king's reign, and then to date events in the first year of King So-and-so or the tenth year of King So-and-so. Finally they had lists of past kings covering many centuries.

Such records were at first only pictures, like those of the Dakota chief's list of years in Fig. 22. As time went on the business of the government and the people made it necessary to have records of transactions. A farmer, for example, might want to know how much he had paid as taxes. He might scratch a rude picture of his basket grain-measure

and a number of strokes on the mud wall of his hut, to indicate the number of measures of grain he had paid. The use of these pictorial symbols was the earliest step leading toward writing. Such pictorial writing is in use today among certain North American Indians. The Alaskan natives send messages in pictorial form scratched on a piece of wood. The *exact words* of the message are not represented. Fig. 23 might be read by one man, "No food in the tent," while another might read,



FIG. 22. PART OF A DAKOTA CHIEF'S LIST OF SEVENTY-ONE NAMED YEARS

Lone Dog, a Dakota chief, had a buffalo robe with seventy-one named years recorded on it, beginning in 1800, when he was a child of four. A year when whooping cough was very bad was called the Whooping-Cough Year; its sign shows a human head coughing violently (1). Another year, very plentiful in meteors, was called the Meteor Year, and its sign was a rude drawing of a falling meteor (2). A third year saw the arrangement of peace between the Dakotas and the Crows; its sign was therefore two Indians, with differing style of hair, indicating the two different tribes, exchanging pipes of peace (3). Thus, instead of saying, as we do, that a thing happened in the year 1813, the Indian said it happened in the Whooping-Cough Year, and by examining his table of years he could tell how far back that year was

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"Lack of meat in the tepee." Such pictorial signs thus conveyed ideas only. Among the American Indians the desire of a chief to record his personal exploits also led to pictorial records of them (Fig. 24). It should here be noticed again that the *exact words* are not indicated by this record, but the chief's valiant achievement is merely so suggested that it might








FIG. 23. PICTORIAL MESSAGE
SCRATCHED ON WOOD BY
ALASKAN INDIANS

A figure with empty hands hanging down helplessly, palms down, as an Indian gesture for uncertainty, ignorance, emptiness, or nothing, means "no." A figure with one hand on its mouth means "eating" or "food." It points toward the tent, and this means "in the tent." The whole is a message stating, "There is no food in the tent"

be put into words in a number of different ways. The early Egyptian kings prepared strikingly similar picture records.

But this pictorial stage, beyond which native American records never passed, was only a preliminary to writing. Two steps had to be taken before the pictorial records could become real—that is, *phonetic writing*. First, each object had to gain a fixed form, always the same, and always recognized as the sign for a *particular word* denoting that object. Thus, it would become a habit that the drawing of a loaf should always



be read "loaf," not "bread" or "food"; the sign for a leaf would always be read "leaf," not "foliage."¹

The *second* step, then, naturally followed; that is, the leaf , for example, became the sign for the syllable "leaf" wherever it might occur. By the same process  might become the sign for the syllable "bee" wherever found. Having thus a means of writing the syllables "bee" and "leaf," the next step was to put them together, thus, , and they would then represent the word "belief." Notice, however, that in the word "belief" the sign  has ceased to suggest the idea of an insect. It now represents only the syllable "be." That is to say,  has become a *phonetic* sign.

¹ The author is of course obliged to use *English* words and syllables here, and consequently the signs also are not Egyptian, but are devised for this demonstration.

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If the writing of the Egyptian had remained merely a series of pictures, such words as "belief," "hate," "love," "beauty," and the like could never have been written. But when a large number of his pictures had become phonetic signs, each representing a syllable, it was possible for the Egyptian to write any word he knew, whether the word meant a thing of which he could draw a picture or not. This possession of *phonetic* signs was what made real writing for the first time. It arose among these Nile-dwellers earlier than anywhere else in the ancient world.

Egyptian writing contained at last over six hundred signs, many of them representing whole syllables, like . The Egyptian scribe gradually learned many groups of such syllable signs. Each group, like , represented a *word*. Writing thus became to him a large number of sign-groups, each group being a word; and a series of such groups formed a sentence.

At a very early date the Egyptians went still farther, for they finally possessed a series of signs each representing only a *letter*—that is, *alphabetic* signs, or, as we say, real letters. There were twenty-four letters in this alphabet, which was known in Egypt by the end of the First Union, that is, by the thirty-fifth century B.C. It was thus the earliest alphabet known. At that



FIG. 24. PICTORIAL RECORD OF THE VICTORY OF A DAKOTA CHIEF NAMED RUNNING ANTELOPE

This Dakota Indian prepared his autobiography in a series of eleven drawings, of which this is but one. It records how he slew five hostile braves in a single day. The hero, Running Antelope, with rifle in hand, is mounted upon a horse. His shield bears a falcon, the animal emblem of his family, while beneath the horse is a running antelope, which is of course intended to inform you of the hero's name. We see the trail of his horse as he swept around the copse at the left, in which were concealed the five hostile braves whom he slew. Of these, one figure bearing a rifle represents all five, while four other rifles in the act of being discharged indicate the number of braves in the copse

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time the Egyptians might have written their language with twenty-four alphabetic letters if the *sign-group* habit had not been too strong for the scribes, just as the *letter-group* habit is strong enough with us today to prevent the introduction of a simplified phonetic system of spelling English. If we smile at




























| | |
|--|---|
|  = smooth breathing, like h in "honor." As vowel, see below |  = ch (like ch in German "ich") |
|  = y (in Greek times it was used as vowel) |  = kh (like ch in Scotch "loch" or German "Bach") |
|  = guttural, pronounced in back of throat; not used in English |  = s |
|  = w (later  was also used;  both signs as vowels, see below) |  = s (originally of slightly different sound from the preceding) |
|  = b |  = sh |
|  = p |  = q (in Greek times also used for k) |
|  = f |  = k |
|  = m (later  was also used for m) |  = g |
|  = n |  = t |
|  = r |  = th |
|  = l in late times (originally r or rw) |  = d |
|  = h |  = dh or dsh (like j in "jug") |

FIG. 25. THE EGYPTIAN ALPHABET

Each of these letters represents a consonant. The Egyptians of course *pronounced* their words with vowels as we do, but they did not *write* the vowels. Just as the consonants *w* and *y* are sometimes used as vowels in English, so three of the Egyptian consonants came to be employed as vowels in Greek times. The first letter (smooth breathing) was thus used as *a* or *e*; the second letter (*y*) as *i*; and the fourth (*w*) as *u* or *o*.

the Egyptian's cumbrous sign-groups, future generations may as justly smile at our often absurd letter-groups.

The Egyptians soon devised a convenient equipment for writing. They discovered that they could make an excellent water-color paint or ink by thickening water with a little vegetable gum and then mixing in soot or pure carbon from the blackened pots over the fire. Dipping a pointed reed into this mixture, they found they could write very well. They

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learned that they could split a kind of river reed, called *papyrus*, into thin strips, upon which they could write with comparative ease. This papyrus was also a more conveniently portable material than bits of pottery, bone, and wood, which were all they had at first. Desiring a larger sheet, they hit upon the idea of pasting their papyrus sheets together with overlapping edges. This gave them a very thin sheet; but by pasting two such sheets together, back to face, with the grain crossing at right angles, they produced a smooth, tough, nearly white or pale-yellow paper. The Egyptians had thus made the

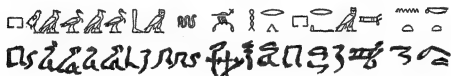


FIG. 26. AN EXAMPLE OF EGYPTIAN HIEROGLYPHIC (UPPER LINE) AND ITS EQUIVALENT IN THE RAPID RUNNING HAND (LOWER LINE) WRITTEN WITH PEN AND INK ON PAPYRUS AND CALLED *Hieratic*, THE WRITING OF ALL ORDINARY BUSINESS

Hieratic corresponds to our handwriting; while hieroglyphic corresponds to our print. In the above example the signs in the lower row show clearly that they are the result of an effort to make quickly the signs in the hieroglyphic row above. Note also that the Egyptian usually wrote from right to left, and this line begins at the right and reads to the left. Vertical lines, that is, downward reading, were also employed. A still more rapid and abbreviated hand called *Demotic* arose later (eighth century B.C.)

discovery that a thin vegetable membrane offers a most practical surface on which to write, and the world has since discovered nothing better. In this way arose pen, ink, and paper. All three of these inventions have descended to us from the Egyptians, and paper still bears its ancient name *papyrus*¹ (Latin *papyrus*), but slightly changed.

The invention of writing and of a convenient system of records on paper has had a greater influence in uplifting the human race than any other achievement in the life of man.

¹ The change from *papyrus* to "paper" is really a very slight one, for *os* is merely the Greek grammatical ending, which must be omitted in English. This leaves us *papyr* as the ancestor of our word "paper," from which it differs by only one letter.

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It was then, and still continues to be, more important than all the battles ever fought and all the constitutions ever devised.

Among the people of the Nile Valley outside of the temple and the court of the king, writing was almost unknown. The people continued to live in villages like those of the early periods. The cemeteries of these villages, long entirely overlooked by the archeologists, were first discovered in 1894 and have since been found stretching far along the margin of the desert on both sides of the Nile. Thousands of the graves in these cemeteries have been excavated, and their contents give us almost all the information we now have about the people of this age. The pottery jars which were put into the graves are sometimes painted with many-oared Nile boats. These are the earliest boats of which we have any knowledge. They show us that the river towns were already carrying on trade with each other, for each boat carries on a pole a standard, the symbol of the town from which it came. The cemeteries of the First Union have thus yielded about three hundred of these boats with standards.

The traffic in these craft extended from the sea to the cataracts. Two hundred and twenty-two of the standard-bearing boats came from the western Delta. This shows us how the prehistoric kingdom of Lower Egypt was leading in commerce. It indicates also that the seaport of Egypt on the Mediterranean was already at the western corner of the Delta, where Alexander the Great later founded Alexandria, the greatest seaport of ancient times. Below the First Cataract a rude carving on the rocks depicts a boat being drawn by thirty-three men pulling on a tow-line and evidently hauling the boat through the Cataract. As pictured the boat is ten feet long and in reality will have been a craft of some size. Its presence here suggests far-reaching authority wielded by the earliest Egyptian kings.

One of the most important facts revealed by the cemeteries of this age is the increase in the number of objects of copper. The graves of these cemeteries contain many more tools and implements of copper than those of earlier Nile communi-

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ties. There was here and there a fortunate man who carried a copper dagger, although his neighbors had to be content with daggers of stone. Copper axes and chisels were to be had in trade, and a few rare workmen possessed them.

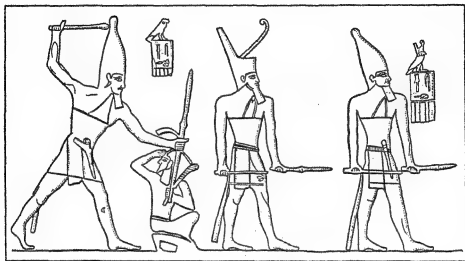


FIG. 27. MINING INSCRIPTION OF A KING OF THE SECOND UNION ENGRAVED ON THE ROCKS OF SINAI

The king is represented twice wearing the tall white crown of Upper Egypt and once (center) wearing the curious crown of Lower Egypt, thus showing that this particular king ruled both of the old prehistoric divisions of the land. The earliest Egyptians told their story in this way by pictures instead of words. Another part of this picture-story is found in the arrangement of the first two figures at the left. The king, armed with stone mace and dagger (in his belt), grasps a kneeling captive by the hair and raises the mace for a fatal blow. The long-haired, bearded captive is a typical early Asiatic. The pictured story is that this king, by means of the military escort which protected his mining expedition, smote the Asiatics of Sinai and so established his right to mine copper in that region. Placed here as a record of the expedition, these gigantic figures of the Pharaoh also served as a warning to any other Asiatics who might be tempted to molest later Egyptian mining expeditions in Sinai. The hieroglyphs in the two little rectangles at right and left give the name of the king. Expeditions, a few centuries later, were writing the whole story in hieroglyphs—not forgetting even to complain of the heat in Sinai!

At the close of the First Union the two kingdoms fell apart, and for some time they existed independently, side by side. Then there arose a strong leader in Upper Egypt whose name was Menes. First he made himself king of the prehistoric kingdom of Upper Egypt. Then he invaded Lower Egypt and con-

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quered it (about 3400 B.C.). This conquest brought about a new union, over which ruled a king of Upper Egypt. Menes inherited the civilization of the First Union. Just as the power and prosperity of the First Union were based on plow culture and the production of plentiful grain, so that of the Second Union grew out of the earliest mining on a large scale and the possession of plentiful copper. With the Second Union, therefore, began the Age of Metal.

These early kings of the Second Union were very proud of their ability to send mining expeditions into the mountains of the neighboring peninsula of Sinai, and there we still find the mining tunnels which they drove into the mountains. These are the earliest known copper mines, and the successors of Menes had their people carve upon the neighboring rocks huge records of their presence there. These scenes are the oldest known historical monuments bearing written records.

The Pyramid-builders

The possession of tools of copper enabled the Egyptians to construct tombs and temples of stone masonry. The great stone pyramids in the royal cemetery of Gizeh show what the Egyptian mechanics of this period could accomplish with copper chisel and tubular drill. It is difficult to believe that these colossal buildings were erected by men whose ancestors, only a few generations earlier, were buried in pits scooped out on the margin of the desert.

Complete mastery of stone building was a step taken very quickly, but we have seen that it was preceded by a very slow and gradual change from stone tools to those of metal. That Egyptian in Sinai who noticed the first bit of copper probably lived about two thousand years before the Gizeh pyramids were built, and for almost two thousand years the knowledge of metal had no effect upon building. Only a few generations, indeed less than a century and a half before the earliest of the stone pyramids, the Egyptian masons were still building the tombs of their kings out of sun-baked brick. Such a royal tomb was at first merely a chamber like a cellar in the ground, covered with a flat wooden roof at about ground level. On this

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roof was raised a mound of sand and gravel as the king's monument. The first piece of stone masonry ever put together, so far as we know, was a lining of limestone blocks to form the underground burial chamber of a royal tomb. The structure could hardly be called a building, for, like a cellar wall, it was all below ground.

The next step, a real building aboveground, was still of brick. And then, in the thirtieth century B.C., the royal architect Imhotep created the first architecture in stone. He built



FIG. 28. THE OLDEST SURVIVING BUILDING OF STONE MASONRY

This terraced building, often called the step pyramid, was the tomb of King Zoser. It was about 200 feet high. It may have been that the terraces of such a building were filled up with masonry in one slope, and thus produced the first pyramid. The step pyramid was built by the architect Imhotep about 2940 B.C.

for his king, Zoser, a tomb which is the *oldest surviving building of stone masonry in the world*. Around this great tomb Imhotep erected a wonderful group of beautiful buildings, of fine limestone masonry, including two more tombs of the royal family. The fronts of these two tombs were adorned with stone piers so gracefully fluted that they looked like the slender Greek columns of twenty-five hundred years later.

The erection of Imhotep's terraced building was an important step toward the construction of the pyramid form of tomb. A little over half a century later, so rapid was the prog-

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ress, the architects of King Khufu were building the Great Pyramid of Gizeh (twenty-ninth century B.C.). From the earliest piece of stone masonry to the construction of the

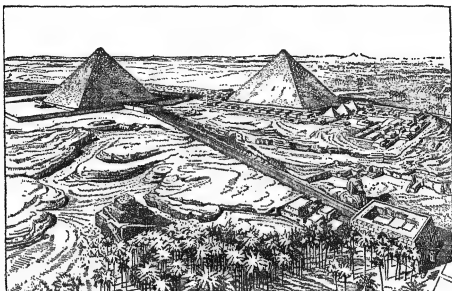


FIG. 29. RESTORATION OF THE GREAT PYRAMID AND OTHER TOMB-MONUMENTS IN THE CEMETERY OF GIZEH

These royal tombs belonged to the leading kings of the early part of the Pyramid Age. The Great Pyramid, the tomb of King Khufu (Greek *Cheops*), is on the right. Next in size is that of King Khafre, on the left. On the east side of the pyramid was a temple, where food, drink, and clothing were placed for the use of the dead king in the life hereafter. These temples, like the pyramids, were built on the desert plateau above, while the royal town was in the valley below (on the right). For convenience, therefore, the temple was connected with the town below by a covered gallery of stone. This corridor may be seen descending in a straight line from the pyramid and temple of King Khafre and ending below, just beside the Sphinx, in a large oblong building of stone, called a valley-temple. The pyramids are surrounded by the tombs of the queens and the great lords of the age. At the lower left-hand corner is an unfinished pyramid, showing the inclined ramps up which the stone blocks were dragged. These ramps were built of sun-baked brick and were removed after the pyramid was finished. (After Hoelscher)

Great Pyramid, less than a century and a half elapsed. Most of this advance was made during the thirtieth century B.C. Such rapid progress in control of mechanical power can be found in no other period of the world's history until the nineteenth century of the Christian era.

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This progress becomes very real to us when we know that the Great Pyramid covers thirteen acres. It is a solid mass of masonry containing about 2,300,000 blocks of limestone, each weighing on an average two and a half tons. The sides of the Pyramid at the base were 756 feet long,¹ and the building was originally nearly 500 feet high. Herodotus tells us that a hundred thousand men were working on this royal tomb for twenty years, and we can well believe it.

To manage and to feed a hundred thousand workmen around this great building must have required a very skillful ruler and a great number of trained leaders who were in the king's service. The king who was able to undertake such vast works was the most powerful human being that the world had ever seen. The palace in which he lived was called the "Great House." The Egyptian word for Great House has descended to us through the Hebrew as *Pharaoh*, for the term came ultimately to designate the king himself.

Grouped around the pyramids are numbers of much smaller tombs of stone masonry. In the smaller tombs were buried the relatives of the king, and the great men of his court. These men, led by the king, formed the government of Egypt. Just as they once formed a group around the king's palace in this life, so after death their tombs now cluster around the royal pyramid. The cemetery thus continues to this day to be a picture of the government of Egypt under the kings of the Second Union.

The king had two kinds of officials to aid him in carrying on his government. There were the *local* officials who were scattered about through all Egypt, and the *central* officials who lived at the capital near the king. It was the duty of the *local* officials to collect taxes all over Egypt. It was also their business to try the law cases which arose, and every judge had before him the *written law*,² which bade him judge justly.

¹ It should be remembered that the pyramid is *solid*. Compare the length of the Colosseum (about 600 feet), which is built around a *hollow* inclosure.

² This Egyptian code of laws has, unfortunately, been lost, although its existence is well attested by the evidence from scenes and inscriptions.

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The king's huge *central* offices occupied low, sun-baked brick buildings, which sheltered hundreds on hundreds of clerks, with their reed pens and their rolls of papyrus, keeping the king's records and accounts. These clerks had records of the taxpayers' names and how much each owed, and they issued receipts when the taxes were paid, just as at the present day. Such arrangements did not arise in Europe until the Roman Empire. The taxes received from the people were not in money, for coined money did not yet exist. Payments were made in produce, such as live stock, grain, wine, honey, linen, and the like. These had to be stored in cattle-yards, granaries, and storehouses—a large group of buildings and inclosures which formed the treasury of the king.

Such government buildings made the capital a city of some size, the largest city which the life of man had yet produced. The chief quarter of the royal city was formed by the palace of the king and the beautiful gardens which surrounded it. The palace and its grounds, surrounded by the villas of the king's officials and the offices of the government, especially the great group of treasury buildings—all these together formed the capital of Egypt, the royal city. It extended far southward from Gizeh and was later called Memphis. But the city was built of sun-baked brick and wood, and it has therefore vanished.

The city of the dead (that is, the pyramids and the tombs clustering around them), being built of stone, has, fortunately, proved more lasting. It is possible here at Gizeh to follow the history of the royal family and their relatives for about one hundred and ten years. And the other pyramid cemeteries carry us still farther. From the summit of the Great Pyramid there is a grand view southward, down a splendid line of pyramids rising dimly as far as one can see on the southern horizon. We must remember that if each pyramid was a royal tomb, then each tomb of this kind means that a king lived, ruled, and died. One after another for about five hundred years these kings were buried, each in his pyramid, until the pyramid line was over sixty miles long and thus marks out for us today some five hundred years of time. This period, roughly

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from the thirtieth to the twenty-fifth century B.C., is often called the Pyramid Age.

Egyptian Religious Ideas and Beliefs

The Egyptians devoted so much of their wealth and time, skill and energy, to the erection and equipment of their tombs because they had developed certain beliefs concerning the hereafter. The weapons of the primitive hunter, together with jars of food and drink, had been laid beside him in his grave perhaps for thousands of years before there was any king or kingdom in the Nile Valley. Gradually the monarchy and the advancing civilization which went with it evolved an elaborate material equipment for the dead—a monumental tomb with its mortuary furniture. Furthermore, although the Egyptians might transfer the life of the departed to some distant region, far from the tomb where the body lay, yet they were never able to detach the future life entirely from the body. It is evident that they could conceive of no survival of the dead without it. Gradually, therefore, they developed a more and more pretentious and a safer repository for their dead, until, as we have seen, it became a colossal stone structure. Not only did the Egyptians seek in this manner to shelter and protect the body after death, but they also began the practice of embalming, by which means the body would be preserved as a mummy. They thought that if this mummified body was placed in the tomb, in a small room deep under the mass of stone masonry, it would assuredly escape destruction. Thus each ruler of this age spent a large share of his available resources in erecting the tomb which was to receive his body and insure its preservation after death. The noblemen and officials were just as zealous in preparing for the life hereafter, and in most cases they left large endowments for the upkeep of their tombs.

We shall understand these ancient beliefs about death better if we recall the life of the hunters of the Stone Age and how they finally forsook their hunting to draw their food from the earth by cultivating grain. This change gradually directed their attention to the green life of the earth and its black soil

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as a source of life. The profound change from hunting to agriculture slowly affected religion. The whole Near East had become an agricultural region, and for the first time in their long struggle for survival early men began to feel their dependence on the fruitfulness of the earth. This feeling, inspiring reverence and thankfulness, brought a new spirit into their religion. It is a spirit which is not only the fundamental basis of the religious beliefs of the North American Indians, but survives also to this day in our own religion as one of the important consequences of the great change from hunting to agriculture.

This ever-reviving vegetable life of the earth seemed like a living being which could not suffer final death. It was very natural to believe that this undying life was a god. In Egypt his name was Osiris, and the Egyptians believed him to be the spirit of the green life of the earth which they saw fading and apparently dying each year, and then always reviving again. A similar belief grew up all along the eastern end of the Mediterranean and down to the Persian Gulf. In Western Asia the god's name was Tammuz, Adonis, and other names locally. Thus the most beloved god of Egypt, as well as nearly all the local gods of Western Asia, especially in Syria, Palestine, Assyria, and Babylonia, were believed to have lived, died, and risen again. In Egypt the enormously ancient association with Asia in this faith was never forgotten, and the Egyptian myth of Osiris told how his dead body finally floated ashore at Byblos on the Phœnician coast, where it revived as a green tree and came to life again. In Western Asia a tree became the symbol of this reviving life, and they had a beautiful feast each year, when they erected and planted a tree and decorated and clothed it with green leaves. This tree has descended to us in the form of the Maypole, which we still continue to erect and to decorate, with feasting and dancing, to celebrate the return of spring. In this feast men first expressed their feeling of dependence upon the reviving life of the earth, which brought them their food in the grain-fields. It was thus the early world's religious response of gratitude for the possession

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of agriculture. In Western Asia this idea did not lead men to believe in an enjoyable life of the dead in the next world.

In Egypt, on the other hand, men loved to believe that Osiris was the life-giving power which not only furnished them their food in *this* world, but would care for them also in the *next* and give them a happy existence, when their bodies lay out yonder in the great cemetery on the margin of the desert. Thus the Osiris faith created a firm belief in a blessed life hereafter. This great god of the dying and ever-reviving life was also pictured as a tree in Egypt. At the same time he sometimes seemed to the Egyptians to be the fertile black soil, out of which the green life came, and they used to picture the



FIG. 30. WINGED SUN-DISK, SYMBOL OF THE SUN-GOD

The sun's disk is in the middle, and two serpents (cobras), one on each side of it, rear their heads. The wings are those of a falcon, for in this form the Sun-god was believed to be a falcon flying across the sky

grain as actually sprouting from his body as if it were soil. Then, as they saw how this soil was refreshed by the water of the Nile, they also thought that Osiris must be the Nile. The great river, the fertile soil which he refreshed, and the green life which he brought forth—all these the Egyptians thought of together as a single god, Osiris, the imperishable life of the earth.

The Egyptians had many gods, but there were two whom they worshiped above all others. One of these was, as we have seen, Osiris, who had triumphed over death; the other was the sun, which shines so gloriously in the cloudless Egyptian sky. His name was Re, and as god of the living he was their greatest god. Their most splendid temples were erected for his worship. Indeed, the pyramid is a symbol sacred to the Sun-god. There were many Egyptian gods whose earthly symbols were *animals*, but the animal worship usually attributed to Egypt was a degeneration belonging to the last stage of the

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dying Egyptian religion in Roman times. The animals were not gods in this early time, but only *symbols* of the divine beings, just as the winged sun-disk and the pyramid were symbols of the Sun-god.

The Pyramid Age: Economics, Society, and Art

The Pyramid Age is the earliest period of human life which is fully revealed to us in pictures produced at the time. These pictures are preserved in the tombs grouped around the pyramids. A stroll among these tombs is almost like a walk among the busy communities which flourished in this populous valley in the days of the pyramid-builders. Each tomb had its chapel to which, it was thought, the dead nobleman who was buried beneath the tomb might return every day. Here, therefore, his relatives left food and drink on a stone tablet where he could always find it. He would also find the stone walls of this room covered from floor to ceiling with pictures in relief sculptures, beautifully painted, showing the daily life on the great domain which formed his estate.

It is a revealing experiment to examine these pictures carved on the chapel walls. First we see the tall figure of the nobleman himself as he stands looking out over his fields and inspecting the work going on there. These scenes are the oldest known pictures showing the work of planting and cultivating a field. Here, too, we find the herds, long lines of sleek, fat cattle, some of them milch cows led up and tied to be milked, others used as beasts of burden, for we notice the oxen drawing the plow. But we find no horses in these tombs of the Pyramid Age, for the horse was still unknown in Egypt. Pictured very often on these walls, however, are the donkeys with loads of grain on their backs, for it would have been impossible to harvest the fields without them.

On the next wall we find again the tall figure of the nobleman inspecting the booths and yards where the craftsmen of his estate are working. Yonder is the coppersmith. He surely had never heard of his ancestor who picked up the first bead of copper, perhaps two thousand years earlier. Much progress had been made since that day. This man could make excellent

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copper tools of all sorts, but the tool which demanded the greatest skill was the long, flat rip saw, which the smith knew how to hammer into shape out of a broad strip of copper five or six feet long. Such saws may be seen in the wall reliefs. This coppersmith was, moreover, already able to deliver orders



FIG. 31. RELIEF SCENE FROM THE CHAPEL OF A NOBLEMAN'S TOMB IN
THE PYRAMID AGE

The tall figure of the nobleman stands at the right. He is inspecting three lines of cattle and a line of fowl brought before him. Note the scribes who head the two middle rows. Each is writing with pen on a sheet of papyrus, and one carries two pens behind his ear. Such reliefs, after being carved, were colored in bright hues by the painter

of surprising size, such as thirteen hundred feet (about a quarter of a mile) of copper drain piping for a pyramid temple where excavation has found it—the earliest plumbing known to us.

On the same wall we discover the lapidary holding up for the nobleman's admiration splendid stone bowls cut from diorite. Although this kind of stone is as hard as steel, the bowl is ground to such thinness that the sunlight glows through its dark-gray sides. Other workmen are cutting and grinding

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tiny pieces of beautiful blue turquoise. These pieces they inlay with remarkable accuracy into recesses in the surface of a magnificent golden vase (*champlevé*) just made ready by the goldsmith. We find the booth of the goldsmith filled with workmen and apprentices. They hammer and cast, solder and fit together, richly wrought jewelry which can hardly be improved upon by the work of the best goldsmiths and jewelers of today.

In the next space on this wall we see the potter, who no longer builds up his jars and bowls with his fingers alone, as



FIG. 32. PEASANT MILKING IN THE PYRAMID AGE

The cow is restive and the ancient cowherd has tied her hind legs. Behind her another man is holding her calf, which rears and plunges in the effort to reach the milk

in the Stone Age. He now sits before a small horizontal *wheel*, upon which he deftly shapes the whirling vessel. When the soft clay vessels are ready, they are no longer unevenly burned in an *open* fire, as among the Neolithic potters in the Swiss lake-villages, but here in the Egyptian potter's yard are

long rows of *closed* furnaces of hard clay as tall as a man. When the pots are packed into these furnaces they are burned evenly, because they are protected from the wind. Here also the craftsmen are making glass in the form of glaze. This art the Egyptians had discovered centuries earlier. They made brilliant tiles covered with gorgeous glazes for beautifying house and palace walls. Later the Egyptian craftsmen learned how to make glass objects; that is, not merely to spread it as a glaze on other substances, but to shape it into many-colored bottles and vases, which were widely exported.

These wall-scenes also show us women weaving linen cloth. The picture, of course, gives no idea of the fineness of the fabric, but fortunately pieces of royal linen, wrapped around the mummy of a king of this age, have survived. This product of the ancient Egyptian *hand-loom* is so finely woven that it can scarcely be distinguished from silk, and the best work of

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the modern *machine-loom* is coarse in comparison. With such a hand-loom these weavers of Egypt furnished the earliest known specimens of tapestry, to be hung on the walls of the king's palace or stretched out to shade the roof garden of the nobleman's villa.

As we move on, the wall-scenes show us barelegged men gathering huge bundles of papyrus reeds along the edge of the Nile marsh. These reeds furnish piles of papyrus paper in long narrow sheets. The Egyptian sailing-ships, which we shall find



FIG. 33. POTTER'S WHEEL AND FURNACE

The potter squats before his horizontal wheel, which is like a flat, round plate whereon the jar revolves while it is being shaped. He keeps the wheel turning with one hand, and with the other he shapes the soft clay jar as it whirls on the wheel. This wheel is the ancestor of our lathe. The completed pots are stacked in the brick furnace at the left. The furnace is already very hot, for the man tending the fire holds up his hand to shield his face from the heat. The man in the center places the pots in rows. The three men at the right are smoothing off the rough places which the wheel cannot take care of. Perhaps one of them is polishing the outside of the burned pot with a shell—a custom of the ancient Egyptian as well as of his present-day descendant

on the Mediterranean, in course of time added bales of this Nile paper to their cargoes, and carried it to Syria and Europe.

We seem almost to hear the hubbub of hammers and mallets as we approach the next section of wall, where we find the cabinetmakers and shipbuilders at work. Here are the busy cabinetmakers, fashioning luxurious furniture for the nobleman's villa. The finished chairs and couches for the king or the rich are overlaid with gold and silver, inlaid with ebony and ivory, and upholstered with soft leather cushions. Close by the furniture workshops is a long line of curving hulls, with workmen swarming over them like ants, fitting together the earliest sea-going ships as well as boats.

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The river shipping, which had already begun under the First Union, increased now very rapidly as the manufacture of so many different things encouraged exchange among the towns. The river must have been fairly alive with boats and barges (often shown on the tomb walls) bearing goods to be

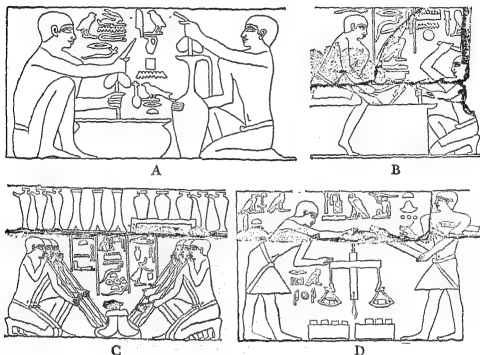


FIG. 34. EGYPTIAN CRAFTSMEN AT WORK

A. Lapidaries hollowing out stone vessels with a boring tool somewhat similar to a center-bit. Attached to the implement are a handle and two heavy weights (to act as a balance-wheel). The drill was of flint, but the handle was probably of wood. B. Carpenters using an adze and a chisel with mallet in the manufacture of a door. C. Metal workers using blowpipes to force a draft on a mixture of ore and charcoal in order to smelt the copper ore. This is the earliest and simplest form of blast furnace. D. Goldsmiths weighing bars of gold. (From "The Mastaba of Mereruka," I, by the Sak-kara Expedition, Prentice Duell, Field Director [Oriental Institute Publications, XXXI], Pl. 30)

carried either to the treasury of the king for taxes or to the markets of the towns where they could be exchanged for other goods. Among the wall-scenes there is a picture of the market-place itself. We can watch the shoemaker offering the baker a pair of sandals as payment for a cake, or the carpenter's

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wife giving the fisherman a little wooden box to pay for a fish; while the potter's wife is willing to give the apothecary two bowls fresh from the potter's furnace in exchange for a jar of fragrant ointment. We see, therefore, that these people had *no coined money*, and that in the market-place trade was exchange of actual goods. Such was the business of the common people. If we could see the large dealings in the palace and its offices, we should find there heavy rings of gold of a standard weight, which circulated like money. Rings of copper also

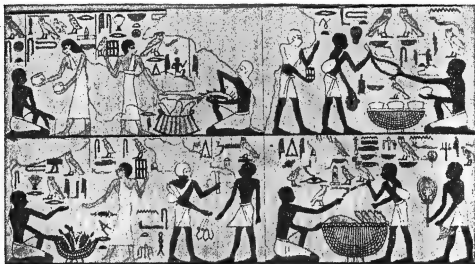


FIG. 35. SCENES IN AN EGYPTIAN MARKET
(After Lepsius)

served the same purpose. Such rings were the forerunners of coined money.

These people in the picture of the market-place were the common folk of Egypt in the Pyramid Age. Some of them were free men, following their own business or industry. Others were slaves, working the fields on the great estates. Neither of these lower classes owned any land. Over them were the landowners, the king, and his great lords and officials. From their tombs we know a great many of the noblemen by name, and if we took a walk through the cemeteries of Gizeh and Sakkara, we could copy a list of them, which would be like a "directory" of the great men of Egypt who lived in the wealthy quarter of the royal city when the pyramids of Gizeh

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were being built nearly five thousand years ago. In this way, by reading their names and their titles on the tomb walls, we learn to know the grand viziers and the chief treasurers, the chief judges and the architects, the chamberlains and marshals of the palace, and so on. We can even visit the tomb of the architect who built the Great Pyramid for King Khufu, and we have portrait-statues of many other noblemen.

Among these great lords of the Pyramid Age the highest rank was of course that of the members of the royal family itself. After the mother of the great Khufu had been buried elsewhere, her tomb was entered and partially plundered by tomb-robbers. Alarmed at this event, and in order to make her burial perfectly safe, Khufu commanded his officers to bring to Gizeh her sarcophagus and all the beautiful furniture which had been placed in her first tomb. East of the now famous site where Khufu's enormous pyramid was then under construction, he had a shaft cut straight down a hundred feet into the limestone. At the bottom the workmen hewed out a room in the solid rock, and the queen-mother's tomb equipment was carried down the deep shaft and deposited in this room. The entire shaft from bottom to top was then filled up with solid masonry blocks, which were cleverly masked where they were visible at the top. In this way the queen's burial was successfully protected from disturbance and remained untouched by human hands for nearly five thousand years.

When discovered by the Harvard-Boston expedition the wooden framework of the queen's lovely furniture had decayed or shrunk beyond recognition, but the sheet gold with which the furniture had been overlaid still survived and made it possible to restore each piece by building a new framework of modern wood, which could then be re-covered with the ancient gold overlay. Thus we are today able to see the very palanquin, or carrying chair, a wheelless carriage, in which the queen's bearers bore her abroad to take the air, the chair in which she rested when she returned to the palace, the bed in which she slept, the jewel-box in which her maids were accustomed to lay away the gorgeous rings of silver incrustated with bright-colored dragon flies of blue turquoise, lapis-lazuli, and

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red carnelian with which her ankles were adorned at palace festivities. Even the copper needle with which her maids stitched the queen's wardrobe was there. These gifts to the great queen from her husband Snefru, and her son Khufu, furnish us almost our only vision of the royal splendor of the Pyramid Age.¹ They reveal to us the art and the life of the king's court over fifteen hundred years before the later glimpses of royal splendor which we gain from the furniture of Tutenkhamon.

Hardly less regal are the charming pictures from the actual life of the courtiers, which we find on the tomb walls. They show us the owner of the tomb likewise seated at ease in his palanquin, as he returns to his house from the inspection of his estate. The slaves who are his bearers carry him into the shady garden before his house, where they set down the palanquin and cease their song.² His wife advances at once to greet him. Her place is always at his side; she is his sole wife, held in all honor, and enjoys every right which belongs to her husband. This garden is the nobleman's paradise. Here he may recline for an hour of leisure with his family and friends, playing at a game of draughts, listening to the music of the harp played by his wife or to a three-piece orchestra of harp, pipe, and lute; or watching women entertainers in the slow and stately dances of the time. Meanwhile his children are sporting about among the arbors, splashing in the pool as they chase the fish, playing with ball, doll, and jumping-jack, or teasing the tame monkey which takes refuge under their father's ivory-legged stool.

We shall never fully know all the influences that raised the earliest men from savagery and brutish instincts to gentleness and courtesy, but here where we can observe on the monuments of Egypt the earliest known family life, it is obvious that the long dependence of helpless little children upon the support and protection of father and mother had much to do with softening and refining the early savagery of man and transforming it into solicitude and affectionate concern for the wel-

¹ See Reisner, G. A., *Bulletin of the Boston Museum of Fine Arts*, May 1927, Supplement to Vol. XXV; also Vol. XXVI (1928), pp. 76-88; Vol. XXVII (1929), pp. 83-90; and Vol. XXX (1932), pp. 55-60.

² This song is recorded, with other songs, on the tomb-chapel walls.

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fare of wife and children. These charming family scenes on the Egyptian monuments without doubt disclose to us the gracious result of an age-long process.

Moreover in this remote age the inscriptions in the tombs show us the social recognition that the individual's claim to worthy character might be based on his spirit and conduct in his relations with his own family, father, mother, brothers, and sisters. Repeatedly these noblemen of the Pyramid Age sum up their deserving qualities with the statement, "I was one beloved of his father, praised of his mother, whom his brothers and sisters loved." It is evident, furthermore, that while the range of good conduct may at first have been confined to the family, it expanded in the Pyramid Age to become a neighborhood or community matter. Over and over again these men of four thousand five hundred to five thousand years ago affirm their innocence of evil doing. It is clear also that moral worthiness was deemed of value in the sight of the gods and might materially influence the happiness of the dead in the hereafter. Harkhuf, a nobleman of Elephantine who explored the Sudan in the twenty-sixth century B.C., says in explaining the motive for his exemplary life, "I desired that it might be well with me in the Great God's presence."

Such a nobleman as we have been following was fully aware of high obligations. Among many wise sayings the Grand Vizier Ptahhotep had said: "Established is the man whose standard is righteousness, who walketh according to its way." Goodness and beauty were close together in Egyptian thinking and both grew up in the midst of luxury.

As he sits in his garden, the nobleman drops one hand idly upon the head of his favorite hound, and with the other beckons to the chief gardener and gives directions regarding the fresh Romaine lettuce¹ which he wishes to try for dinner. The house where this dinner awaits him is large and commodious, built of sun-dried brick and wood. Light and airy, as suits the climate, we find that it has many latticed windows on all sides.

¹*Lactuca sativa*, which the Egyptians domesticated from a wild state along with a large number of other garden vegetables which we have inherited from them.

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The walls of the living-rooms are scarcely more than a frame to support gayly colored hangings which can be let down as a protection against winds and sand storms when necessary. These give the dwelling a very bright and cheerful aspect. The house is a work of art, and we discern in it how naturally the Egyptians demanded beauty in their surroundings. This they secured by making their *useful things beautiful*.

Beauty surrounds the nobleman on every hand as he sits with his wife and friends at dinner. The lotus blossoms on the handle of his carved spoon, and his wine sparkles in the deep blue calyx of the same flower, which forms the bowl of his wineglass. The muscular limbs of the lion or the ox, beautifully carved in ivory, support the chair in which he sits or the couch where he reclines. The painted ceiling over his head is a blue and starry heaven resting upon palm-trunk columns each crowned with its graceful tuft of drooping foliage carved in wood and colored in the dark green of the living tree; or columns in the form of lotus stalks rise from the floor as if to support the azure ceiling upon their swaying blossoms. Doves and butterflies, exquisitely painted, flit across this indoor sky. Beneath our feet we find the pavement of the dining-hall carpeted in paintings picturing everywhere the deep green of disheveled marsh grasses, with gleaming water between and fish gliding among the swaying reeds. Around the margin, leaping among the rushes, we see the wild ox tossing his head at the birds twittering on the nodding rush tops as they vainly strive to frighten away the stealthy weasel creeping up to plunder their nests.

It was only because they possessed trained artists that the Egyptians were able to adorn their tomb-chapels with these beautifully painted reliefs. Indeed, we can find, in one of the chapels, pictured in one corner of the wall, a portrait of the artist himself. Here he has represented himself enjoying a plentiful feast among other people of the estate. In all his pictures he has used color in a pleasing manner. The composition shows intelligence and humor, but perspective is almost unknown to him, and objects in the background or distance are depicted of the same size as those in front.

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The portrait sculptor was the greatest artist of this age. His statues were carved in stone or wood and painted in the colors of real life; the eyes were inlaid with rock crystal, and

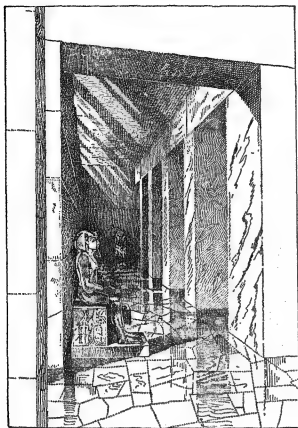


FIG. 36. RESTORATION OF THE CLERESTORY HALL IN THE VALLEY TEMPLE OF KHAFRE

The roof of this hall was supported on two rows of huge stone piers, each a single block of polished granite weighing 22 tons. This view shows only one row of the piers, the other being out of sight at the right. At the left above, the light streams in obliquely from the very low clerestory windows. The statues shown here had been thrown by unknown enemies into a well in an adjacent hall, where they were found about eighty years ago.

(After Hoelscher)

they still shine with the gleam of life. More lifelike portraits have never been produced by any age, although they are the earliest portraits in the history of art. Such statues of the kings are often superb. They were set up usually in the pyramid temples. In size the most remarkable statue of the Pyramid Age is the Great Sphinx, which stands in the cemetery of Gizeh. The head is a portrait of Khafre, the king who built the second pyramid of Gizeh, and was carved from a promontory of rock which overlooked the royal city. It is the largest portrait ever wrought.

We have already mentioned the beauty of the earliest architecture in stone produced by Imhotep.

the first architect. A second stage of architecture in stone is revealed to us in the massive granite piers and walls of

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Khafre's valley temple beside the Sphinx. This splendid hall was lighted by a series of oblique slits, or light chutes, which are really low roof windows. They occupied the difference in level between a higher roof over the middle aisle of the hall and a lower roof on each side of the middle. Such an arrangement of roof windows, called a clerestory, passed from Egypt

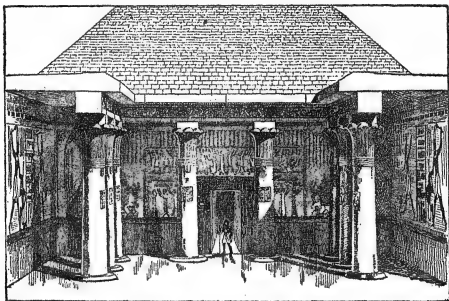


FIG. 37. COLONNADES IN THE COURT OF A PYRAMID TEMPLE

Notice the pyramid rising behind the temple. The door in the middle leads to the holy place built against the side of the pyramid. The center of the court is open to the sky; the roof of the porch all around is supported on columns, among the earliest known in the history of architecture. Each column represents a palm tree, the capital being the crown of foliage. The whole place was colored in the bright hues of nature, including the painting on the walls behind the columns. (After Borchardt)

to Greece and Rome. There the Christian architects later found it and used it for the roof and windows of the nave in the basilica churches and cathedrals. And so this granite hall of Khafre in the Pyramid Age was the ancestor of the leading form of Christian architecture as it developed in Europe three thousand five hundred years later.

The weight and massiveness of the piers in Khafre's hall make it a place of grandeur. Less than a century later (twenty-eighth century B.C.) the Egyptian architects desired graceful-

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ness rather than grandeur. Instead of these heavy *square* piers or pillars the architects then began to erect light and graceful *round* columns with beautiful capitals, a style already suggested in Imhotep's buildings. These new shafts were ranged in rows and formed the earliest colonnades in the history of architecture.

The useful and beautiful things which Egypt was now making began to be carried across the Mediterranean to Europe,



FIG. 38. EARLIEST REPRESENTATION OF A SEAGOING SHIP (TWENTY-EIGHTH CENTURY B.C.)

The scene is carved on the wall of the pyramid temple of King Sahure. The people are all bowing to the king whose figure (now lost) stood on shore (at the left), and they salute him with the words written in a line of hieroglyphs above, meaning, "Hail to thee! O Sahure [the king's name], thou god of the living! We behold thy beauty." Some of these men are bearded Phœnician prisoners brought by this Egyptian ship, which, with seven others, had therefore crossed the eastern end of the Mediterranean and returned. The big double mast is unshipped and lies on supports in the stern. The model and ornaments of these earliest known ships spread in later times to ships found in all waters from Italy to India

and by land to Western Asia. These things were a part of the earliest civilization which commerce was thus bringing to Europe and Asia. At the same time, as we shall see, Western Asia also had been making the most surprising advances in civilization, and these began to exert an influence in Egypt, showing that there was active commerce between Egypt and Asia. This commerce also connected the western Delta and Crete. It is evident, however, that the king had been carrying on some oversea commerce for centuries.

Besides continuing the work on their copper-mines in Sinai, the kings were also sending caravans of donkeys far up the Nile

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into the Sudan to traffic with the people of the south, and to bring back ebony, ivory, ostrich feathers, and fragrant gums. The officials who conducted these caravans were the earliest explorers of inner Africa, and in their tombs at the First Cataract they have left interesting records of their exciting adventures among the wild tribes of the south—adventures in which some of them lost their lives¹. The royal fleet was also sent on expeditions to a far-away coast land of the south called Punt, at the southern end of the Red Sea, where they found the same products and brought them back by water.

The grandeur of the civilization gained by the Egyptians of the Pyramid Age is conclusive evidence of a stable and highly organized national life under the kings. The noblemen, however, became so powerful that the kings could no longer control them. The once closely centralized government gradually suffered complete decentralization and, by the middle of the twenty-fifth century B.C., had become a loosely coördinated group of feudal states. Nearly two thousand years of unparalleled development since the rise of a united state thus ended in political conditions very like those which had prevailed in the beginning. This early period in Egypt had been one of extraordinary fertility when the youthful strength of a people of boundless energy had, for the first time, found the organized form in which it could express itself. It now remained to be seen if the conflict between local and centralized authority would exhaust the strength of this people, or if a reconciliation could be effected which would produce harmony and union and permit the continued development of Egyptian culture.

¹ See the author's *Ancient Records of Egypt*, Vol. I. §§ 325-336, 350-374.

CHAPTER IV

THE STORY OF EGYPT: THE FEUDAL AGE AND THE EMPIRE

Governmental Disorganization and the Feudal Age

THE tremendous impression produced by the fall of the pyramid-builders and the final break-up of the Second Union, after it had endured for a thousand years, did not at first find full expression, but, like the fall of Rome, it wrought powerfully upon the minds of the men who saw it. Thinking men were thrown back from consideration of outward splendors to the contemplation of inner values. The futility of reliance on material agencies became more and more evident. Relying on just such means, the great sovereigns of the Pyramid Age had for centuries carried on a hopeless struggle with death—a struggle whose decaying monuments were daily demonstrating the failure of material means.

The Egyptian sages who arose after the end of the Second Union were deeply stirred as they looked out over the deserted tombs of their ancestors and contemplated the colossal futility of the vast pyramid cemeteries which lay in silent desolation. If already in the Pyramid Age there had been some relaxation in the conviction that by sheer material force man might make conquest of immortality, the spectacle of the ruins now quickened such doubts into open scepticism, a scepticism which ere long found effective literary expression.

For a thousand years in Egypt there had stood unshaken a national order personified and maintained by the king, but now that the organized power, which had endured so long, had collapsed, the foreign invaders discovered the feebleness of the once great nation, and they poured into the Delta from Asia in the east and Libya on the west. Anarchy ensued. Government was practically suspended. One sage writes, "The laws of the judgment-hall are cast forth, men walk upon them in the public places, the poor break them open in the midst of the street." The economic processes of the land ceased, and social conditions suffered complete upheaval. In the course of possibly two thousand years of national life organized humanity had built up some seemingly imperishable values, and

GOVERNMENTAL DISORGANIZATION

those which men had prized most had been swept away. It was the earliest known age of social disillusionment, the first such catastrophe which the written documents of mankind have preserved to us.

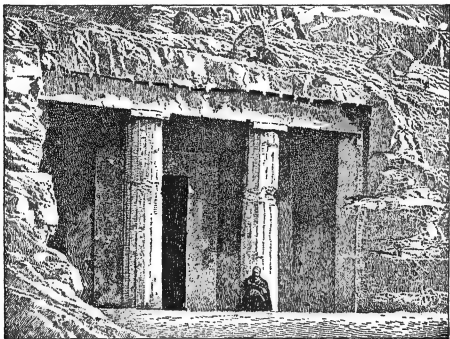


FIG. 39. CLIFF-TOMB OF AN EGYPTIAN NOBLEMAN OF THE FEUDAL AGE

This tomb is not a masonry building like the tombs of the Pyramid Age, but it is cut into the face of the cliff and is therefore of solid rock. The chapel entered through this front door contains painted relief pictures, like those of the Pyramid Age, and also many written records. In this chapel the nobleman tells of his kind treatment of his people; he says: "There was no citizen's daughter whom I misused; there was no widow whom I oppressed; there was no peasant whom I evicted; there was no shepherd whom I expelled; . . . there was none wretched in my community, there was none hungry in my time. When years of famine came I plowed all the fields of the Oryx barony [his estate] . . . preserving its people alive and furnishing its food so that there was none hungry therein. I gave to the widow as to her who had a husband; I did not exalt the great above the humble in anything that I gave." All this we can read inscribed in this tomb

Fortunately there were contemplative men who, while fully recognizing the corruption of society and the terrible consequences of governmental disorganization, nevertheless dared dream of better days. Some of them were convinced that a new

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age might be ushered in by a generation of honest and just officials; others believed that it could be done by a righteous king as the saviour and regenerator of society. The men of the first school, as they scanned life, held wholesome and practical principles of right living as applicable to the daily situation of the average member of the official class. An unknown king of this dark period after the fall of the pyramid-builders admonished his son: "More acceptable is the virtue of the up-right man than the ox of him that doeth iniquity."

A pamphleteer of the second school, named Neferrohu, after describing the wretched conditions in the country, prophesies the actual advent of a saviour-king. He calls this righteous king "Ameni," which is an abbreviation of the name Amenemhet. This is obviously Amenemhet I, the great founder of the Twelfth Dynasty, the restorer who reëstablished the power of Egypt about 2000 B.C., and who is significantly stated in an historical inscription of three generations later, to have "cast out unrighteousness, . . . because he so greatly loved righteousness."

As far as the *righteous king* was concerned, the Messianists saw their dream fulfilled in the accession of Amenemhet I. How was it with the more prosaic reformers whose hopes were based on a new generation of *just officials*? As a matter of fact the two programs could not be separated, for the reign of a righteous king was almost wholly ineffective without a body of just officials to carry out the royal policy. The "righteous" Amenemhet I evidently made every effort to establish the old ideals of justice. He could not, however, wholly curb the noblemen, who were really feudal barons, and the power which they still retained gave them much independence, like those feudal lords of medieval Europe. This period is therefore sometimes called the Feudal Age of Egypt.

Egyptian Literature and Learning

It was a highly cultivated age. Fragments from the libraries of the feudal barons have been found. The oldest of all surviving books are in the form of rolls of papyrus, which once were packed in jars, neatly labeled, and ranged in rows on the

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nobleman's library shelves. If we could take some of these jars down and examine the contents, we should find among them not only tractates setting forth the corruptions in society and the sufferings of the poor and the humble, but also the most ancient story-books in the world: a tale of the wander-



FIG. 40. A PAGE FROM THE STORY OF THE SHIPWRECKED SAILOR, THE EARLIEST "SINDBAD," AS READ BY THE BOYS AND GIRLS OF EGYPT FOUR THOUSAND YEARS AGO (ONE-THIRD OF SIZE OF ORIGINAL)

This page reads: "Those who were on board perished, and not one of them escaped. Then I was cast upon an island by a wave of the great sea. I passed three days alone, with (only) my heart as my companion, sleeping in the midst of a shelter of trees, till daylight enveloped me. Then I crept out for aught to fill my mouth. I found figs and grapes there and all fine vegetables, etc. . . ." The tale then tells of his seizure by an enormous serpent with a long beard, who proves to be the king of this distant island in the Red Sea, at the entrance of the Indian Ocean. He keeps the sailor three months, treats him kindly, and returns him with much treasure to Egypt. The island then seems to have sunk and vanished forever. In form such a book was a single strip of papyrus paper, 5 or 6 to 10 or 12 inches wide, and often 15 to 30 or 40 feet long. When not in use this strip was kept rolled up, and thus the earliest books were rolls, looking, when small, like a college diploma or, when large, like a roll of wall paper

ings and adventures of Sinuhe, an Egyptian Odysseus, in Asia; a tale of shipwreck at the gate of the unknown ocean beyond the Red Sea, the exploits of a hero of the sea in whom we recognize the ancestor of Sindbad the Sailor; and tales of wonders wrought by ancient wise men and magicians seventeen or eighteen hundred years earlier than the magic feats of Moses at the Pharaoh's court, but identical in character.

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The development of civilization in the Feudal Age discloses profound changes as contrasted with the Pyramid Age. With the incoming of the pyramid-builders there had been a tremendous growth in power, in building, and in art. They had also laid the foundation for a structure of human life based on the recognition of character. It was the Feudal Age, which on this foundation was able to erect the superstructure. The social thinkers of the Feudal Age created the first age in which conscience not only created character, but also *made character a social force*. This advance profoundly affected religion. The men of the Feudal Age were thinking of their gods as more than merely rulers of the natural world, controllers of sun and moon, or earth and waters. The Egyptians were beginning to believe that the gods were likewise supreme in a realm of right and wrong, that every man was responsible to them for his conduct, and that every soul would answer in the next world for his earthly character. Thus for the first time in human experience man was rising from a struggle with purely material and physical forces to higher conquests in a realm of moral values. It was the most fundamentally valuable transition in the whole course of the human career, and was yet to bring into human life priceless possessions with which things like the conquest of fire or the discovery of metal could not compare.

Probably a number of papyrus rolls were required to contain the drama of Osiris—a sacred play in which the life, death, burial, and resurrection of Osiris were pictured. This play was performed at an annual feast in which all the people loved to join. It is our earliest known drama—a kind of Passion Play, which lasted for a number of days. Excavation has uncovered fragments of another bookroll which sets forth a similar drama in the form of a pageant. In this earliest preserved play we find parts of the dialogue with stage directions as well as pictures of the action. This papyrus dates from the eighteenth or nineteenth century B.C. and is probably the oldest illustrated book in the world. There were also rolls containing songs and poems, like the beautiful morning hymn sung by the nobles of the king's court in greeting to the sovereign

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with the return of each new day. Another song in praise of the king was arranged to be sung responsively by two groups at the great court festivals. It was constructed in parallel verses or lines, like the parallel lines of the Hebrew Psalms. It is the oldest surviving example of this form of poetry.

It is a surprising fact that even at this early date a number of rolls were needed to deal with the beginnings of science. The most valuable of these is the Edwin Smith Papyrus, which is a copy made in the seventeenth century B.C. of an older medical book. It is the earliest known really scientific document, for in it we find the human mind for the first time endeavoring to discern and record the *facts*, and then to base conclusions upon these observed facts. It is a treatise on surgery and external medicine, which begins at the top of the head and goes downward. The papyrus is, unfortunately, incomplete, and the discussion ends with those cases which deal with the thorax and the uppermost spinal vertebræ. This medical treatise contains the earliest known observations on the human brain, and indeed the word "brain" occurs in it for the first time in any known written document. Among these observations we find that this ancient surgeon has noted that nervous control of the lower limbs is localized in the brain, thus disclosing a kind of investigation of the brain which in modern times arose quite recently. The physician has also discovered that the heart is the driving power in a system of which it is the center. This is not, however, a recognition of the circulation of the blood. It is interesting to note that surgical stitching is mentioned in this papyrus for the first time in medical literature.

There were also rolls containing many of the recognized rules of arithmetic, based on the decimal system which we still use; others treat the beginnings of algebra and geometry. In *plane* geometry it is surprising to find that these earliest known mathematicians already had rules for computing correctly the area of a triangle, of a trapezium, and even of a circle, which was figured as the square of eight-ninths of the diameter. The value of π which results from this computation is 3.1605, a result surprisingly near the correct value. Finally, in dealing

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with *solid* geometry these mathematical rolls show methods of calculating how many bushels of grain there are in cylinder-shaped granaries of varying depths and diameters. They also explain how to calculate the content of a frustum of a square pyramid. The formula for solving this problem was not discovered in Europe until 3000 years later. Meantime the Egyptian method had of course been forgotten until the recent translation of a papyrus disclosed it. Observations of the heavenly bodies, with simple instruments, were made. These records, like those in geography, have been lost; we know that the distinction between the planets and the fixed stars was already made, but there was no recognition of a celestial *system*, and the Twelve Signs of the Zodiac were not of Egyptian origin.

The Rulers of Egypt in the Feudal Age

The progress of literature and science testifies in part to the rich and varied life of the Feudal Age in Egypt. Quite as revealing is the evidence of great material advancement, which was due to the enterprise of the dynasty of Amenemhet. The productive capacity of Egypt was raised to an unprecedented level. Huge earthen dikes were erected and extensive basins made for storing up the Nile waters needed for irrigation. In this manner the yield of the feudal lands and estates was greatly increased. Records were kept of the maximum height of the river from year to year. Indeed, the marks of these Nile levels are still to be found cut on the rocks at the Second Cataract. Thus nearly four thousand years ago they were already doing on a large scale what our modern governments have only recently begun to do by their irrigation projects for recovering arid lands.

The kings of the Feudal Age seem to have organized the government with great vigor and energy. This was probably necessary in order to adjust, and if possible to subject to the authority of the kingship, the rights and privileges attained by the powerful landed nobles. In order to facilitate the collection of taxes census lists were prepared. Fortunately for us, a few of these earliest census sheets in the world have survived.

THE RULERS OF EGYPT IN THE FEUDAL AGE

The king found it feasible to gather together a small standing army. Thus, probably for the first time, a class of professional soldiers appeared in Egypt. They garrisoned the palace and strongholds of the royal house from Nubia to the Asiatic frontier. They also took a prominent part in time of war, although the king could and did draw on the feudatories for contingents when engaged in conquest.

Amenemhet and his successors dispatched various military expeditions, and made their power felt by their neighbors on

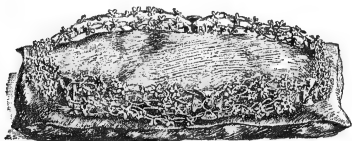


FIG. 41. EGYPTIAN TIARA OR DIADEM

Found on the head of a princess of the Feudal Age as she lay in her coffin. The diadem had been placed there nearly four thousand years ago. It is in the form of a chaplet, or wreath, of star flowers wrought of gold and set with bright-colored, costly stones, and is one of the best examples of the work of the Egyptian goldsmiths and jewelers. It is shown here lying on a cushion

both north and south. As the result of a series of campaigns into Nubia the southern boundary of Egypt was extended to the Second Cataract, and two hundred miles of river were added to the kingdom. Strong fortresses, the ruins of which still stand, were erected on this southern frontier against the Nubian tribes. Forays were made also into Syria-Palestine, and if the Asiatics of the coast did not acknowledge Egyptian sovereignty, they were at least very much in the Egyptian sphere of influence. This is particularly evidenced by the fact that the names Amenemhet and Sesostris—the names borne by the kings of this dynasty—have been found inscribed on numerous monuments excavated along the Syrian coast.

The monarchs of the Feudal Age seem to have been especially zealous in seeking new sources of wealth outside of the

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country. They dug a canal from the north end of the Red Sea westward to the nearest branch of the Nile in the eastern Delta, where the river divides so that it empties into the Mediterranean through a number of mouths. This canal made it possible for the Egyptian ships in the Mediterranean to go up the easternmost mouth of the Nile, to enter the new canal, and passing eastward through it, emerge into the Red Sea. Thus the Mediterranean Sea and the Red Sea were connected by a canal nearly four thousand years before the Suez Canal was constructed. Such a connection was as important to the Egyptians as the Panama Canal is to the United States. It gave the Egyptian fleet a cruising radius extending northward to the Aegean Sea and the coast of Syria, and southward to the Somali coast (the land of Punt) and the gates of the Indian Ocean. Egyptian trading-ships were thus seen often in the harbors of the north Syrian coast and less frequently in those of Punt. These waters, both north and south, seemed to the sailors of the Feudal Age the end of the world, and their stories of wonderful adventures in these far-away regions must have delighted many a circle of villagers on the feudal estates.

The enlightened rule of the house of Amenemhet did much to prepare the way for Egyptian leadership in the early world. But not long after 1800 B.C. the power of the kings of Feudal-Age Egypt suddenly declined. Their final fall was due to an invasion of a foreign people called Hyksos, who entered Egypt from Asia.

The Founding of the Empire

For nearly a hundred years the Hyksos were supreme in Egypt. There were probably native Egyptian princes ruling locally in various parts, but these were doubtless vassals of the Hyksos kings. Shortly after the beginning of the sixteenth century B.C., a prince of Thebes rebelled, and finally the Egyptians drove the hated foreigners from the country. The conqueror of the Hyksos set about a reorganization of the government. His capital was established at Thebes. It is therefore in the ruins of this once mighty city (of which Luxor is the

THE FOUNDING OF THE EMPIRE

modern successor) that we may find the story of the Empire, the third period of Egyptian history.¹

The monuments at Thebes are rich in inscriptional and pictorial records. The cliffs on the west of the Nile, honey-

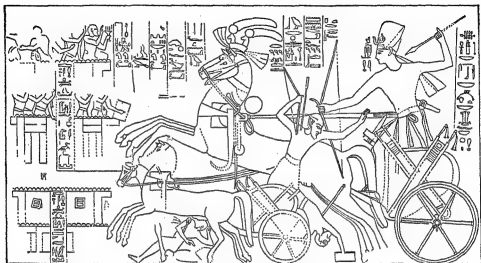


FIG. 42. A PHARAOH OF THE EMPIRE FIGHTING IN HIS CHARIOT

This relief shows the Pharaoh (Ramses II) after he has overcome the bearded defenders of two Asiatic strongholds shown at the left. The reins of the horses are fastened around the Pharaoh's waist, leaving both his hands free, and with uplifted spear he is on the point of stabbing the Asiatic chieftain, who is helplessly falling out of the smaller chariot in the foreground. This is one of an enormous series of such scenes, 170 feet long, carved in relief on the outside of the Great Hall of Karnak. Such sculpture was brightly colored and served to enhance the architectural effect of the building as well as to impress the people with the heroism of the Pharaoh. The color has now disappeared, and the sculpture is battered and weatherworn. (After Wreszinski)

combed as they are with the tombs of the great men of the Empire, contain whole chapters of the life and history of the period. The splendid temples, found here on both sides of the river, present scenes illustrating the pageantry and glory of the Empire. Enormous pictures sculptured in relief on the walls of the temples depict the victorious wars of the Egyptians during the centuries of conquest. In these pictures we see the giant figure of the Egyptian Pharaoh as he stands in

¹ The three great ages of history on the Nile were the Pyramid Age (about the thirtieth to the twenty-fifth century B.C.), the Feudal Age (flourishing 2000 B.C.), and the Empire (about 1580-1150 B.C.).

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his war chariot scattering the enemy before his plunging horses. The kings of the Pyramid Age had never seen a horse, and it was not until after the close of the Feudal Age that horses began to be imported into Egypt from Western Asia, where they had been used for perhaps five hundred years or more. With the horse came also chariots, and Egypt, having learned warfare on a scale unknown before, became a military empire.

The Empire kings, or Pharaohs, thus became great generals with a well-organized standing army made up chiefly of archers and heavy masses of chariots. With these forces the Pharaohs conquered an empire which extended from the Euphrates in Asia to the Fourth Cataract of the Nile in Africa. In much earlier times human government had begun with tiny city-states, which gradually merged together into nations; but the organization of men had now reached a point where *many nations* were combined into an empire including a large part of the ancient Near East. This world power of the Pharaohs lasted from the early sixteenth to the middle of the twelfth century B.C.—somewhat over four hundred years.

The Karnak Temple was and still is the greatest building in Thebes. Enlarged by reign after reign and dynasty after dynasty, it reveals the historical, artistic, and religious development of the Egyptian Empire. Behind the great hall towers a huge obelisk, a shaft of granite in a single piece nearly a hundred feet high. It was erected early in the Empire by the first great woman in history, Queen Hatshepsut. There were once two of these enormous monuments; and the extraction of such huge blocks from the granite quarries at the First Cataract, the transportation down the river and the erection in the temple, was a feat of some magnitude—a triumph for the queen's engineers. Hatshepsut might not lead armies into Asia, but she was a woman of vigor and energy. She undertook a building program and other enterprises of peace. Foreign conquest was temporarily abandoned, but the queen showed interest in foreign trade. There were commodities to be obtained from foreign lands which could be used in the adornment of her temple and tomb. An inscription describing

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a great trading expedition to Punt is found on a wall of the queen's magnificent temple which she built on the west side of the river at Thebes. Recent excavation at this temple by an expedition of the Metropolitan Museum of Art has revealed the sphinx bases and other remains of the sculpture along the procession-way to the sanctuary, and even the outlines of

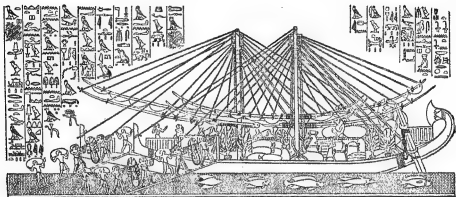


FIG. 43. PART OF THE FLEET OF QUEEN HATSHEPSUT LOADING IN THE LAND OF PUNT

Only two of Hatshepsut's fleet of five ships are shown. The sails on the long spars are furled, and the vessels are moored. The sailors are carrying the cargo up the gangplanks, and one of them is teasing an ape on the roof of the cabin. The inscriptions above the ships read: "The loading of the ships very heavily with marvels of the country of Punt: all goodly fragrant woods of God's Land [the East], heaps of myrrh-resin, with fresh myrrh trees, with ebony and pure ivory, with green gold of Emu, with cinnamon wood, *khesyt* wood, with two kinds of incense, eye-cosmetic, with apes, monkeys, dogs, and with skins of the southern panther, with natives and their children. Never was brought the like of this for any king who has been since the beginning." The scene is carved on the wall of the queen's temple at Thebes

papyrus pools in the lower court. Such are the evidences of the queen's activities as found by modern archeologists; but it was not desired by some of the ancients that the world should know of Hatshepsut.

At Karnak, however, the stones have tongues and reveal many a secret they were not always intended to reveal. Around the base of Hatshepsut's obelisk we find the remains of the stone masonry sheathing with which it was once enveloped till its inscriptions were covered almost to the top. This was done

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by the queen's successor, Thutmose III, in order to conceal the records which proclaimed to the world the hated rule of a woman. In her great temple across the river Thutmose commanded his people to take huge hammers and smash to pieces over a hundred of her splendid stone statues which once adorned the building. Everywhere he hammered out the names

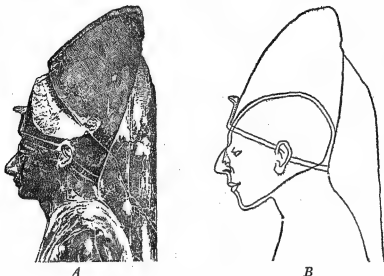


FIG. 44. PORTRAIT OF THUTMOSE III, THE NAPOLEON OF ANCIENT EGYPT (A), COMPARED WITH HIS MUMMY (B)

This portrait (A), carved in granite, can be compared with the actual face of the great conqueror as we have it in his mummy. Such a comparison is shown in B, where the profile of the granite portrait (outside lines) is placed over the profile of Thutmose III's mummy (inside lines). The correspondence is very close, showing great accuracy in the portrait art of this age

of the queen and of all the men who had aided her, including the name of the skillful architect and engineer who had erected this Karnak obelisk and its companion. But the masonry enveloping the obelisk has since fallen down, thus revealing inscriptions which still proclaim the fame of Hatshepsut.

Notwithstanding his lack of chivalry, Thutmose III was the first great general in history, the Napoleon of Egypt, and the greatest of the Egyptian conquerors. He ruled for over fifty years, from about 1500 until 1447 B.C. On the temple walls at Karnak we can read the story of his nearly twenty years of warfare, during which he crushed the cities and kingdoms of

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Western Asia and welded them into an enduring empire. At the same time he built the earliest known fleet of warships, and with this he was able to carry his power even into the Ægean Sea. A series of great Pharaohs, whom we may call Egyptian emperors, followed Thutmose III, and their power did not begin to decline for a century or more after his death.

The Higher Life of the Empire

The wealth which these Egyptian emperors captured in Asia and Nubia brought them power and magnificence unknown to

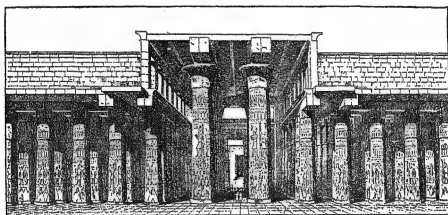


FIG. 45. RESTORATION OF THE GREAT HALL OF KARNAK—LARGEST BUILDING OF THE EGYPTIAN EMPIRE

It is 338 feet wide and 170 feet deep, furnishing a floor area about equal to that of the cathedral of Notre Dame in Paris, although this is only a single room of the temple. There are one hundred and thirty-four columns in sixteen rows. The nave (three central aisles) is 79 feet high and contains twelve columns in two rows, which the architects have made much higher than the rest in order to insert lofty clerestory windows on each side. Compare the very low windows of the earliest clerestory (Fig. 36). In this higher form the clerestory passed over to Europe

the world before, especially as shown in their vast and splendid buildings. A new and impressive chapter in the history of art and architecture was begun. The temple of Karnak at Thebes contains the greatest colonnaded hall ever erected by man. The columns of the central aisle are sixty-nine feet high. The vast capital forming the summit of *each* column is large enough to contain a group of a hundred men standing

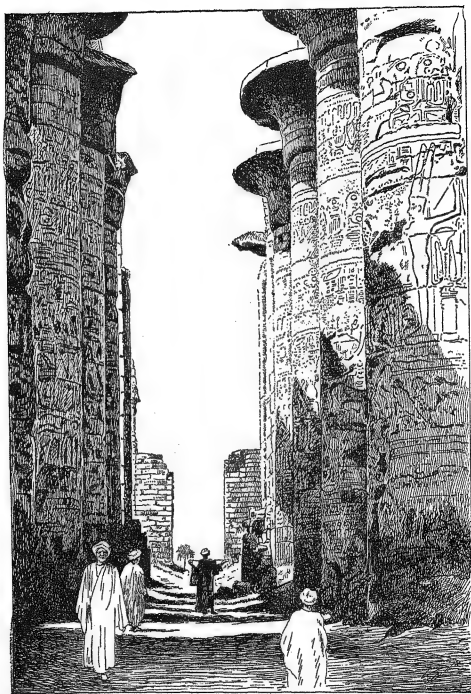


FIG. 46. THE COLOSSAL COLUMNS OF THE NAVE IN THE GREAT HALL OF KARNAK

THE HIGHER LIFE OF THE EMPIRE

crowded upon it at the same time. The clerestory windows on each side of these giant columns are no longer mere light-chutes, low depressed openings, as in the Pyramid Age, but they have now become fine, tall windows, showing us the Egyptian clerestory hall on its way to become the basilica church of a much later period.

Such temples as these at Thebes were seen through the deep green of clustering palms, among towering obelisks and colossal statues of the Pharaohs. The whole was bright with color, and flashing at many a point with bands of sheet gold and silver. Mirrored in the unruffled surface of the temple lake, it made a picture of such splendor as the ancient world had never seen before. As the visitor entered he found himself in a spacious and sunlit court, surrounded by splendid colonnaded porches. Beyond, all was mystery, as he looked into the somber forest of towering columns in the hall behind the court. These buildings were connected by long avenues of sphinxes sculptured in stone, forming parkways which connected the temples and unified them into an impressive group. They thus transformed Thebes into the first great "monumental city" ever built by man—a city which, as a coherent whole, was itself a vast and imposing monument.¹

Much of the grandeur of Egyptian architecture was due to the sculptor and the painter. The colonnades, with flower capitals, were colored to suggest the plants they represented. The enormous battle scenes carved on the temple walls were likewise painted in bright hues. Portrait statues of the Pharaohs, set up before the temples, were often so large that they rose above the towers of the great gateway, or pylon, and they could be seen for miles around. The sculptors could cut these colossal figures from a single block, although they were sometimes eighty or ninety feet high and weighed as much as a thousand tons. An unfinished obelisk of the Empire left lying in the granite quarry at Assuan is one hundred and thirty-seven feet long and if extracted, would weigh over eleven

¹ City plans which treat a whole city as a symmetrical and harmonious unit have long been known in Europe and are now beginning to be made in America.

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hundred tons. The engineers of the Empire moved many such vast burdens for hundreds of miles without any means of multiplying power. It was in works of this massive monumental character that the art of Egypt excelled.

Two enormous portraits of Amenhotep III, the most luxurious and splendid of the Egyptian emperors, still stand on the

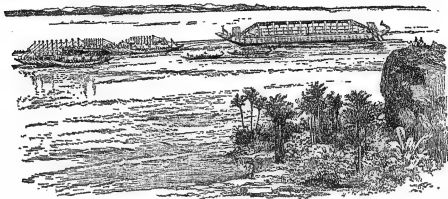


FIG. 47. TRANSPORTATION OF QUEEN HATSHEPSUT'S 350-TON OBELISKS
DOWN THE NILE

The two obelisks are lying base to base on a large Nile barge about 300 feet long. The obelisks are each 97½ feet long and together make a burden of some 700 tons in the barge. Thirty tugboats are required to tow the barge. Each tugboat has thirty-two oarsmen, making nine hundred and sixty oarsmen in all. Under the guidance of the engineers in the other small boats these men towed the obelisks downstream from the granite quarries of the First Cataract to Thebes—a distance of about 150 miles. Under each obelisk we can see the sledge on which it was dragged on shore to the place where they were both set up in the Karnak temple.

The scene is restored from a relief on the wall of the queen's temple

western plain of Thebes across the river from Karnak. Behind them rise the majestic western cliffs in which are cut several hundred tomb-chapels belonging to the important men of the Empire. Here were buried the able generals who marched with the Pharaohs on their campaigns in Asia and in Nubia. Here lay the gifted artists and architects who built the vast monuments we have just been discussing, and made Thebes the first great monumental city of the ancient world. Here in these tomb-chapels we may read their names and sometimes long accounts of their lives. Here is the story of the general who saved Thutmose III's life, during a royal elephant hunt in

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Asia, by rushing in at the critical moment and cutting off the trunk of an enraged elephant which was pursuing the king. Here also was the tomb of the general who captured the city of Joppa in Palestine by concealing his men in panniers loaded on the backs of donkeys, and thus bringing them into the city as merchandise—an adventure which afterward furnished part of the story of "Ali Baba and the Forty Thieves."

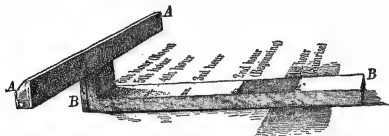


FIG. 48. THE OLDEST CLOCK IN THE WORLD—AN EGYPTIAN SHADOW CLOCK

In sunny Egypt a shadow clock was a very practical instrument. In the morning the crosspiece (*AA*) was turned toward the east, and its shadow fell on the long arm (*BB*), where we see it at the first hour. As the sun rose higher the shadow shortened, and its place on the scale showed the hour, which could be read in figures for six hours until noon. At noon the head (*AA*) was turned around to the west and the *lengthening* afternoon shadow on the long arm (*BB*) was measured in the same way. It was from the introduction of such Egyptian clocks that the twelve-hour day reached Europe. This clock bears the name of Thutmose III and is therefore about thirty-four hundred years old. Nearly a thousand years later such clocks were adopted by the Greeks. It is now in the Berlin Museum. The headpiece (*AA*) is restored after Borchardt

The tomb of this general is now covered with rubbish and modern excavation has not yet uncovered it, but a golden dish which came out of it is in the Museum of the Louvre in Paris.

Such tombs are storehouses of ancient household life, for the surviving family of a man of wealth or power filled his tomb with furniture, clothing, and food, intended to make his life agreeable in the next world. They might even put into his tomb the timepiece he had used in earthly life. Naturally the Pharaohs themselves were magnificently furnished for a life of royal splendor beyond the grave. The most remarkable mortuary equipment of this kind was discovered in the now famous tomb of King Tutenkhamon.

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These tombs of the Empire disclose to us far more than merely the material equipment of daily life. From a study of the paintings and inscriptions which often cover the walls of the Theban tomb-chapels we learn how far the Egyptians had progressed in religious ideas since the days of the pyramids of Gizeh. Each of the great men buried in the Theban cemetery

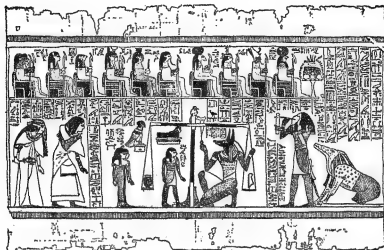


FIG. 49. THE JUDGMENT SCENE IN THE BOOK OF THE DEAD

At the left we see the deceased, a man named Ani, and his wife. Before them are the balances of judgment for weighing the human heart, to determine whether it is just or not. A jackal-headed god operates the scales, while the ibis-headed scribal god Thoth stands behind him, pen in hand, prepared to record the verdict. At the extreme right squats the grotesque "Devouress" waiting to devour the unjust soul. Ani bows humbly and fixes his eye on his own heart in the left scale-pan as it is being weighed over against a feather, the symbol of truth or right in the other scale-pan. Above the balances is written Ani's prayer to his heart not to betray him, and at the top is a line of ancient gods who witness the judgment. (After papyrus in British Museum)

looked forward to a judgment in the next world, where Osiris was the great judge and king. Every good man might rise from the dead as Osiris had done, but in the presence of Osiris he would be obliged to see his soul weighed in the balances over against a feather, the symbol of truth and justice. The dead man's friends put into his coffin a roll of papyrus containing prayers and magical charms which would aid him in the hereafter. The modern name for such a roll is the "Book of the Dead." The "Book of the Dead" was generally illustrated with

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scenes which were supposed to represent certain experiences of the deceased in the next world. Prominent among these is the picture of the Judgment.

When the Empire was about two hundred years old, Amenhotep III's youthful son, Amenhotep IV, became Pharaoh in his father's place. Two centuries of imperial experience in ruling the adjoining regions of two continents on either side of the Isthmus of Suez had gradually familiarized the Egyptians with a *world arena*, larger by far than the lower Nile Valley, within whose limits they had formerly thought of their old national and local gods as living and ruling. The Empire had shifted the Pharaohs to a larger stage, of international extent, where the old gods of Egypt continued to guide the Pharaoh and to strengthen his arm, just as earlier within the limits of Egypt. Gradually the Egyptians had thus come to discern their Sun-god Re as extending his control of human affairs beyond the Nile Valley to the larger imperial stage. He thus became in their thinking an international god, no longer confined to Egypt. No one at that distant day had conceived of the *world* or of a *world god* controlling it. Such limitations are well illustrated by the attitude of America today as we recall its slowness to recognize the fact that the World War, which for the first time carried American troops to another continent, has thrust the American people into an international arena. Out of a somewhat similar experience, internationalism grew up in Egypt after 1400 B.C. With it came a new conception, the *world idea*, and quite naturally, for the first time in human experience, the idea of a *world god*—the sole sovereign over them all. This was the earliest monotheism ("one-godism"), simply *imperialism in religion*, as ancient oriental experience had developed it.

Thus dawned a new age, in which the vision of the Nile-dwellers expanded into far-seeing universalism, bringing with it monotheism centuries before it appeared anywhere else. In such a difficult situation as this the youthful Amenhotep IV succeeded his father about 1375 B.C. He was full of vision, fearless, strong, and unwisely insistent in forcing the new internationalism upon his people. By his attempt to destroy the old

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gods of Egypt and to induce the people to adopt the exclusive worship of the Sun-god he began a new and unprecedented movement in human history. Throughout the great Empire, including its people in both Africa and Asia, he commanded that only the Sun-god, whom he called *Aton*, should be worshiped. In order that the people might forget the old gods, he closed all the temples and cast out their priests. Everywhere he also had the names of the gods erased, especially on all temple walls, and he included even the plural of the common noun "god." He particularly hated Amon, or Amen,¹ the great Theban god of the Empire. His own royal name, Amenhotep (meaning "Amon is satisfied"), contained this god Amon's name, and the king therefore changed his name to Ikhnaton, which means "Profitable to Aton (the Sun-god)."

Ikhnaton, as we must now call him, finally forsook Thebes, the magnificent capital, where there were so many temples of the old gods, and built a new city farther down the river, which he named "Horizon of Aton." It is now called Tell el-Amarna. The city was forsaken a few years after Ikhnaton's death, and beneath the rubbish of its ruins today we find the lower portions of the walls of the houses and palaces which the king and his followers built. Among these houses a German expedition excavated the ruins of a sculptor's studio just before the World War and found it to contain a group of beautiful works which have greatly increased our knowledge of the wonderful sculpture of the age. The cliffs behind Amarna still contain the cliff-tombs of the followers whom the young king was able to convert to the new faith, and in them we find engraved on the walls beautifully sculptured scenes picturing the life of the now forgotten city.

In these Amarna tomb-chapels we may still read on the walls the hymns² of praise to the Sun-god, which Ikhnaton

¹ Amon is the ordinary ancient form of the name, as we have it when it stands alone, or at the end of a compound. At the beginning of a compound, as in Amenhotep (Greek *Amenophis*), it loses the tone and becomes Amen. The popular spelling "Tutankhamen" is therefore incorrect.

² See the author's *The Dawn of Conscience* (New York, 1933), pp. 281-286.

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himself wrote. They show the simplicity and beauty of the young king's faith in the sole God. He had gained the belief

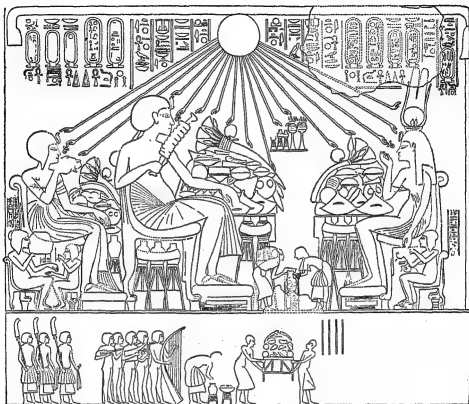


FIG. 50. KING IKHNATON SITTING AT DINNER WITH HIS FAMILY

Old Egyptian custom regarded it as unfitting that a Pharaoh should be portrayed as taking part in the everyday affairs of life with his family. On the earlier Egyptian monuments we are given glimpses of only the most formal family groups until we come to study the cliff-tombs of Ikhnaton's followers at Amarna. In violation of all good old custom these noblemen took delight in picturing on the inner walls of their tombs intimate and charming scenes from the life of their beloved young king. In the left center of the above relief he sits at a well-stocked table eating heartily of a huge haunch of meat held in his right hand. The queen, behind him, is demolishing a *whole* roasted fowl and is not in the least ashamed to "eat with her fingers." Seated on smaller chairs beside her, two little princesses follow the example of their parents. The king's mother and her daughter (at right) dine with the royal family. Four serving men, in the center foreground, busy themselves in passing the food, and an orchestra of stringed instruments furnishes the music at the royal dinner

that one God created not only all the lower creatures, but also all races of men, both Egyptians and foreigners. Moreover, the

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king saw in his God a kindly Father who maintained all his creatures by his goodness, so that even the birds in the marshes were aware of his kindness and uplifted their wings like arms to praise him, as a beautiful line in one of the hymns tells us. In all the progress of men which we have followed through thousands of years, no one had ever before caught such a vision of the great Father of all.

The Decline and Fall of the Egyptian Empire

A new faith like this could not be understood by the common people of the fourteenth century B.C. The country was full of the discontented priests of the old gods and equally dissatisfied soldiers of the neglected army. The priests secretly plotted with the troops against the king, and they found willing ears among the idle soldiery. Confusion and disturbance arose in Egypt, and the conquered countries in Asia were preparing to revolt.

The consequences in Asia have been revealed to us by a remarkable group of over three hundred letters, called the "Amarna Letters," a part of the royal records stored in one of Ikhnaton's government offices at Amarna. Here they had lain for over three thousand years, when they were found by native diggers. They are written on clay tablets in the Babylonian cuneiform (p. 126). Most of these letters proved to be from the kings of Western Asia to the Pharaoh, and they form the oldest international correspondence in the world. They show us how these kings were gradually shaking off the rule of the Pharaoh, so that the Egyptian Empire in Asia was rapidly falling to pieces. The Pharaoh's *northern* territory in Syria was being taken by the Hittites, who were coming in from Asia Minor (p. 209), while his *southern* territory in Palestine was being invaded by the Hebrews, who were drifting in from the desert. In the midst of these troubles at home and abroad Ikhnaton died. Although a visionary and an idealist, he was the most remarkable genius of the early world before the Hebrews.

Ikhnaton had no sons. In lieu of a son he gained a son-in-law by marrying his eldest daughter to a young noble of the court

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whom he at once made co-regent. On the death of this young man he called in another young noble, whose name was Tutenkhaton ("Living image of Aton"), to whom he gave his third daughter, the second having meantime died. This son-in-law he likewise made co-regent with himself, and this arrangement, therefore, left the youth ruling alone when Ikhnaton died. The triumphant priesthood of Amon forced the young king to forsake Ikhnaton's new capital at Amarna, to return to Amon's great city of Thebes, and then to change his name by the substitution of Amon for Aton, thus producing Tutenkhamon ("Living image of Amon").

The worship of Amon and the other gods of Egypt was restored, and Ikhnaton's beautiful Aton faith, the earliest vision of the sole God, disappeared. The men who had seemingly been devoted to it turned against the youthful Tutenkhamon, who soon became a mere puppet in the hands of the more experienced men about him. After a rule of little more than six years, when not much over eighteen years of age, he died, having possibly been put to death by the ambitious priests and soldiers who surrounded him. He was buried among the emperors, the great ancestors of his girl wife, Ikhnaton's daughter. There was no longer a prince of the old Theban family strong enough to maintain its rights. Thus passed away the most powerful royal family Egypt had ever had. We call them the Eighteenth Dynasty, and they are remembered as the founders of the first great empire of the early East. They had ruled for some two hundred and thirty years when their line disappeared (about 1350 B.C.).

The reign of Tutenkhamon thus ended before he had reached the years of manhood. Even if he had possessed the wisdom and the strength of character to face his opponents successfully, it could not be expected that any ruler in his situation could carry on to success Ikhnaton's remarkable effort to transform the religion of Egypt and her Empire. It was an endeavor to alter completely not only religion, but thought, custom, and art. As one might tear up the roots of a plant, so Ikhnaton's movement attempted to tear out of the hearts of the Egyptian people their long-cherished beliefs, customs,

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habits, and especially those religious hopes of protection and happiness in the realm of Osiris after death. Very naturally, after Ikhnaton was gone, the people, particularly the priests, made a savage effort to destroy everything that Ikhnaton's artists and craftsmen had produced. They succeeded so well in this work of destruction that very little has survived to reveal to us the marvelous art and religion of Ikhnaton's revolutionary reign.

It is for this reason that the discovery of Tutenkhamon's tomb has proved of the greatest importance; for it contained works of art and craftsmanship from the age of Ikhnaton. Tutenkhamon was buried in a small cliff-sepulcher of four chambers, hastily excavated in the face of the cliffs in a wild desert valley on the west side of the Nile at Thebes. However, the young queen and the faithful supporters of the royal family made an effort to furnish the boy-king's tomb with all the royal splendor of a Pharaoh. It was equipped with gorgeous furniture and magnificent works of art. In the political confusion following Tutenkhamon's interment his tomb was robbed; but the robbers were caught in the act and the damage they had done was carelessly and only partially made good. Two centuries later, just at the fall of the Egyptian Empire, the laborers excavating the tomb of Ramses VI threw down the rubbish from their work over the forgotten entrance of Tutenkhamon's tomb, and even built their rough huts over it. Thus it escaped observation and destruction after the fall of the Empire. Discovered by Howard Carter in the autumn of 1922, it proved to be the only royal tomb yet found in Egypt which had survived to modern times in large measure intact.

To enter the antechamber of Tutenkhamon's tomb a few days after its discovery was a never-to-be-forgotten experience. There stood the magnificent furniture of a Pharaoh's palace just as it had been placed in this tomb some three thousand two hundred and fifty years ago. The most splendid piece was a marvelous palace chair bearing the name of Tutenkhamon on one of its arms. I shall never forget my feelings when I read on the other arm the name Tutenkhaton, the *earlier* form of the young ruler's name. This older form of the name proved

DECLINE AND FALL OF THE EGYPTIAN EMPIRE

that this exquisite chair was the work of *Ikhнатon's* craftsmen, for it had been used in his Amarna palace before Tut-enkhamon had been forced to change his name. It thus showed that this wonderful tomb was a treasury of art and life reaching back into the revolution of *Ikhнатon*, when the human mind had for the first time freed itself from old limitations and had caught a new vision of beauty and life.

The political consequences of such revolutionary emancipation were disastrous. A new line of kings arose, the greatest of whom were Seti I (c 1313-1292 B.C.) and his son Ramses II (c. 1292-1225 B.C.). After desperate efforts these two kings, father and son, were able to restore to some extent the Egyptian Empire. But they were unable to drive the Hittites out of Syria, for these powerful invaders from Asia Minor excelled in warfare and, moreover, they possessed iron, which could be worked into weapons, while the declining Egyptian Empire was the last great power of the Age of Bronze.¹

At Thebes the symptoms of the coming fall may be seen even at the present day. On the temple walls the battle scenes of the later Empire show numbers of foreigners serving in the Egyptian army. This betrays the fact that the Egyptians had finally lost their temporary interest in war and were calling in foreigners to fight their battles for them. Among these strangers are the peoples of the northern Mediterranean whom we left there in the Stone Age. Here on the Egyptian monuments we find them pictured after they had received from eastern peoples the art of using metal. With huge bronze swords in their hands we see them serving as hired soldiers in the Egyptian army. Their kindred at home and other Mediterranean foreigners finally invaded Egypt in such numbers that the weakened Egyptian Empire fell, in the middle of the twelfth century B.C.

The great Pharaohs, who had maintained themselves for over four hundred years as emperors, were buried at Thebes. On the other side of the cliffs behind the huge statues of

¹ It is not known exactly when the Egyptians first began to use bronze, but the earliest large number of bronze objects found in Egypt date from the Twelfth Dynasty, that is, around 2000 B.C.

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Amenhotep III is a wild and desolate valley formed by a deep depression in the western desert. It has become familiar to western readers as the valley in which the tomb of Tutenkh-amon was discovered. Here are sixty rock-hewn galleries, some of them reaching hundreds of feet into the mountain, where the bodies of the Egyptian emperors were laid to rest,



FIG. 51. VALLEY AT THEBES
WHERE THE PHARAOHS OF THE
EMPIRE WERE BURIED

In the Empire (after 1600 B.C.) the Pharaohs had ceased to erect pyramids. They excavated their tombs in the cliff walls of this valley, penetrating in long galleries hundreds of feet into the rock. The tomb of Tutenkhamon is just at the right of and below the most conspicuous tomb door (Ramses VI), seen near the center of this view

only to suffer pillage and robbery after the fall of the Empire. The only one to escape such post-Empire destruction was that of Tutenkhamon. The weak successors of the emperors, surviving as feeble kings at Thebes, hurried the royal bodies from one hiding-place to another, and finally concealed them in a secret chamber hewn for this purpose in the western cliffs. Here they lay undisturbed for nearly three thousand years, until, in 1881, they were discovered and removed to the National Museum at Cairo. Until recently we were able to look into the very faces of these lords of Egypt and Western Asia who lived and ruled from thirty-five to thirty-one hundred years ago.

The Egyptian Government has now removed the royal bodies to a modern tomb.

With the fall of the Egyptian Empire the initiative and vital force of the nation were ended. Foreign conquerors exploited the people and shipped from the fields grain to feed the Mediterranean world. Greeks and Romans came to visit Egypt as a land of ancient marvels, and left their names scratched here

THE DECIPHERMENT OF EGYPTIAN WRITING

and there upon the monuments, just as modern tourists, admiring the same marvels, have continued to do. The story of Egypt was written on these monuments, but after a time that story was forgotten. The last man who could read Egyptian hieroglyphs died more than a thousand years ago, and for centuries no one could understand the curious writing which travelers found covering the great monuments along the Nile.

The Decipherment of Egyptian Writing by Champollion

For a long time scholars puzzled over the strange Nile records, but were unable to read them. Then the young Frenchman Jean François Champollion took up the problem, and after years of discouraging failure he began to make progress. The names of Ptolemy and Cleopatra, written in hieroglyphs, had been discovered by the great English physicist, Dr. Thomas Young. By the use of these names, Champollion was able to determine the sounds of twelve hieroglyphic signs which he proved to be alphabetic.¹ Champollion then

¹ Champollion found an obelisk bearing on its base a Greek inscription showing that the obelisk belonged to a king Ptolemy and his queen Cleopatra. The obelisk shaft bore a hieroglyphic inscription which he therefore thought must somewhere contain the names Ptolemy and Cleopatra. Other scholars had shown that the ovals, or "cartouches" (Fig. 52) so common on Egyptian monuments, contained royal names. Examination showed two such ovals on the shaft of the obelisk. Champollion concluded that the hieroglyphs in these two ovals spelled the names Ptolemy and Cleopatra. He then proceeded to compare them with the Greek spelling of Ptolemy (*Ptolemaios*) and Cleopatra. These Greek spellings (in our letters) will be found in Fig. 52, each paired with its corresponding hieroglyphic form. All signs and letters in the left pair are numbered with Roman numerals, and in the right pair with Arabic numerals. The first sign (I) in oval A is an oblong rectangle, and if it really is the first letter in Ptolemy's name, it must be the letter P. Now the fifth letter in Cleopatra's name is also a P, and so the fifth sign in the oval B ought also to be an oblong rectangle. To Champollion's delight oval B did not disappoint him, and sign 5 proved to be an oblong rectangle. He was at first troubled by the fact that in his next comparison, II and 7 in the two ovals did not prove to be alike as the sign for T, but he concluded that 7 must be a second form for T, and he was right. The next two signs in oval A (III and IV) corresponded exactly with 4 and 2 in oval B, and showed him that he was certainly on the right road. Although the vowels (e.g. VII and 3) caused him some trouble, he soon saw that Egyptian was inaccurate in writing the vowels, or even omitted them (see Fig. 25). From these two names Cham-

THE STORY OF EGYPT

found that he could read several other royal names, and in 1822, in a famous letter to the French Academy, he announced his discovery and explained the steps he had taken.

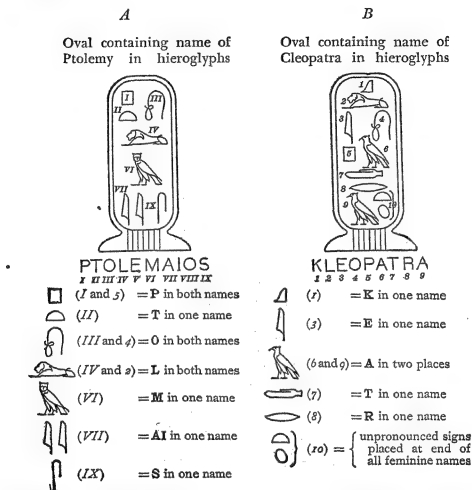


FIG. 52. DIAGRAM SHOWING THE FIRST STEPS IN CHAMPOLLION'S DECIPHERMENT OF EGYPTIAN HIEROGLYPHS

It was not until this point was reached that he was able to make use of the well-known Rosetta Stone, which was therefore not the first key employed by Champollion. But the Rosetta Stone (Fig. 134) enabled him rapidly to increase his

pollion had proved that the Egyptians possessed an alphabet and not merely signs for whole syllables or whole words. He had also learned the sounds of twelve of the letters (see table of signs below the names) and laid the foundation for completing the decipherment by the aid of the Rosetta Stone, which he then for the first time understood how to use, after scholars had been working on it in vain for over twenty years.

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list of known hieroglyphic signs and to learn the meanings of words and the construction of sentences. When he died in 1832 he had written a little grammar and prepared a small dictionary of hieroglyphic. There still remains much to learn about the Egyptian language and writing, but Champollion's marvelous achievement laid the foundations of the new science now called Egyptology. It has restored to the world a lost chapter of human history over three thousand years in length, and has given to the monuments of the Nile a voice that they might tell us their wonderful story of how man gained civilization.

In a similar way the monuments discovered along the Tigris and Euphrates rivers in Asia have been deciphered and made to tell their story. They show us how the peoples of Western Asia emerged from barbarism, gained industries, learned the use of metals, devised a system of writing, and finally rose to the leading position of power in the ancient world. We must therefore turn, in the next chapter, to the story of the early Near East in Asia.

CHAPTER V

WESTERN ASIA: BABYLONIA

The Lands and Races of Western Asia

THE most important home of men in Western Asia is the borderland between the mountains, or Highland Zone, on the north and the desert of the Southern Flatlands. This borderland between the desert and the mountains is a kind of cultivable fringe of the desert—a Fertile Crescent¹ having the mountains on one side and the desert on the other. It forms roughly a semicircle with the open side toward the south. Its western end is at the southeastern corner of the Mediterranean, the center lies directly north of Arabia, and the eastern end is at the northern end of the Persian Gulf. It lies like a horseshoe opening southward, with one side stretching along the eastern shore of the Mediterranean and the other reaching out to the Persian Gulf, while the center has its back against the northern mountains. The end of the western side is Palestine, Assyria makes up a large part of the center, while the end of the eastern side is Babylonia.

This great semicircle, the Fertile Crescent, may also be likened to the shores of a desert-bay, upon which the mountains behind look down—a bay not of water, but of sandy waste, some five hundred miles across, forming a northern extension of the Arabian Desert. After the meager winter rains, wide tracts of the northern desert-bay are clothed with scanty grass, and spring thus turns the region for a short time into grasslands. The history of Western Asia may be described as an age-long struggle between the mountain peoples of the north and the desert wanderers of the south—a struggle which is still going on—for the possession of the Fertile Crescent, the shores of the desert-bay.

Arabia is totally lacking in rivers and enjoys but a few weeks of rain in midwinter; hence it is largely desert, very little of

¹ There is no name, either geographical or political, which includes all of this semicircle. For historical purposes some term designating it is indispensable. In the high-school history *Ancient Times* (Boston, 1916) the author suggested the term "Fertile Crescent." The term has since become current and is now widely used.

THE LANDS AND RACES OF WESTERN ASIA

which is habitable. Its people are and have been from the remotest ages a group of peoples of the white race, called Semites. The Semites have always been divided into many tribes which were never long united into one coherent nation, a condition with which we are familiar among the American Indians, whom we call Sioux, or Seminoles, or Iroquois. So

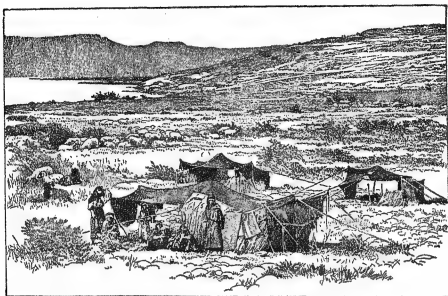


FIG. 53. SEMITIC NOMADS OF THE FERTILE CRESCENT ALONG THE SEA OF GALILEE

The dark camel's-hair tents of these wandering shepherds are easily carried from place to place as they seek new pasturage

we shall find many tribal or group names among the Semites. With two of these we are familiar—the Arabs and the Hebrews whose descendants dwell among us. They all spoke and still speak dialects of the same tongue, of which Hebrew was one. For ages they have moved up and down the habitable portions of the Arabian world, seeking pasturage for their flocks and herds.

From the earliest times, when the spring grass of the border wilderness is gone, these nomads have been constantly drifting in from the sandy area upon the shores of the northern desert-bay. If they can secure a footing there, they slowly make the transition from the *wandering* life of the desert nomad to the

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settled life of the agricultural peasant. There have been times when this slow shift swelled into a great tidal wave of migration. Then the wild hordes of the wilderness rolled in upon the fertile shores of the desert-bay—a human tide from the desert to the towns, which they gradually overwhelmed. We can see this process going on for thousands of years. Among such movements we are familiar with the passage of the Hebrews from the desert into Palestine, as described in the Bible, and some readers will recall the invasions of the Arab hosts which, when converted to Mohammedanism, even reached Europe and threatened to girdle the Mediterranean. After they had adopted a settled town life, the colonies of the Semites stretched far westward through the Mediterranean, especially in northern Africa, even to southern Spain and the Atlantic. But it took many centuries for the long line of their settlements to creep westward until it reached the Atlantic, and we must begin with the Semites in the desert.

Out on the wide reaches of the desert there are no boundaries; the pasturage is free as air to the first comer. No man of the tribe owns land; there are no landholding rich and no landless poor. The men of the desert know no law. The keen-eyed desert marauder looks with envy across the hills dotted with the flocks of the neighboring tribe, which may be his when he has slain the solitary shepherd at the well. But if he does so, he knows that his *own* family will suffer death or heavy damages, not at the hands of the state, but at the hands of the slain shepherd's family. This custom, known as "blood revenge," has a restraining influence like that of law. Under such conditions there is no state. Writing and records are unknown, industries are practically nonexistent, and the desert tribesmen lead a life of complete freedom. The governments holding sovereignty over Arabia today are as powerless to control the wandering Arabs of the wilderness as were formerly the authorities in suppressing the lawlessness of the American herdsmen commonly called cowboys.

The tribesmen drift with their flocks along the margin of the Fertile Crescent till they discern a town among the palm groves. Objects of picturesque interest to the curious eyes of

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the townsmen, they appear in the market-place to traffic for the weapons, utensils, and raiment with which the nomad cannot dispense. It may have been that these nomads early learned to carry goods from place to place and, having thus become the common carriers of the settled communities, they advanced to be traders on their own account, fearlessly leading their caravans across the wastes of the desert-bay lying like a sea between Syria, Palestine, and Babylonia. They became, at any rate, the greatest merchants of the ancient world, as their Hebrew descendants among us still are at the present day.

The wilderness was the nomad's home. Its vast solitudes tinged his soul with solemnity. His imagination peopled the far reaches of the desert with invisible and uncanny beings, and he believed that they inhabited every rock and tree, hill-top and spring. These creatures were his gods, whom he fancied he could control by the utterance of magic charms—the earliest prayers. He believed that such charms rendered these uncanny gods powerless to do him injury and would also compel them to grant him aid.

The nomad pictured each one of these beings as controlling only a little corner of the great world, perhaps only a well and its surrounding pastures. At the next well, only a day's march away, there was thought to be another god, belonging to the next tribe. For each of the tribes had a favorite or tribal god, who, as they believed, journeyed with them from pasture to pasture, sharing their food and their feasts and receiving as his due from the tribesmen the firstborn of their flocks and herds.

The thoughts of the desert wanderer about the character of such a god were crude and barbarous, and his religious customs were often savage, even leading him to sacrifice his children to appease the angry god. On the other hand, the nomad had a dawning sense of justice and of right, and he felt some obligations of kindness to his fellows. This he believed to be the compelling voice of his god. Such feelings at last became lofty moral vision, which made the Semites the religious teachers of the civilized world.

As early as 3000 B.C. the Semites were drifting in from the

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desert and settling in Palestine, on the *western* end of the Fertile Crescent, where we find them in possession of walled towns by 2500 B.C. These predecessors of the Hebrews in Palestine we call Canaanites; of those Semites which settled to the north and east the best-known were the Akkadians and, later, the Amorites; while along the shores of north Syria some of these one-time desert wanderers, the Phœnicians, had taken to the sea. One of the earliest of the Phœnician cities was a flourishing harbor town called Byblos. In the mountains behind it were the great cedar forests furnishing valuable timber, which long before 3000 B.C. had led the Egyptian kings to establish trade relations with the lords of Byblos. By 2000 B.C. all these settled communities of the western Semites had developed no mean degree of civilization, drawn for the most part from Egypt and Babylonia; for the lands along the eastern end of the Mediterranean were on the highway between these two countries, and were therefore in constant contact with both.

While the Semites thus invaded the Fertile Crescent from the *inside* of the semicircle, the peoples on the outside also, that is, the peoples of the Highland Zone, very early entered the Fertile Crescent and established homes there. These people were not Semites, but seem to have belonged to different groups of the white race. For centuries Highland Zone peoples fought with the Semites for possession of the Fertile Crescent.

The earliest civilization of Western Asia arose on the eastern end of the Fertile Crescent along the lower courses of the Tigris and the Euphrates, which we shall henceforth speak of as the "Two Rivers." These two streams rise in the northern mountains, whence they issue to cross the Fertile Crescent and to cut obliquely southeastward through the northern bay of the desert. Here, on the Two Rivers, we can follow various groups of early peoples through several thousand years of developing civilization.

There were three chapters of Tigris-Euphrates history, and the earliest chapter, the story of Babylonia,¹ will be found in

¹ The other two chapters of Tigris-Euphrates history are Assyria and the Chaldean Empire (Chapter VI).

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the lower valley near the mouths of the rivers. As the Two Rivers approach most closely to each other, about three hundred and ten or twenty miles from the Persian Gulf today,¹ but only one hundred and sixty or seventy miles in ancient Babylonian and Assyrian days, they emerge from the desert and enter a low plain of fertile soil, formerly brought down by the rivers. This plain is Babylonia, the eastern end of the Fertile Crescent. But during the first thousand years of the known history of this plain the city of Babylon was of no great importance. The Biblical name for the plain was Shinar, and we shall use this designation in the first part of our discussion, for Babylonia is a name that properly should not be applied to the eastern end of the Fertile Crescent until the beginning of the second millennium B.C., just as we find it misleading to apply the name "France" to Gaul in the days of Julius Cæsar.

Rarely more than forty miles wide, the Plain of Shinar contained probably less than eight thousand square miles of cultivable soil—roughly equal to the State of New Jersey or the area of Wales.² It lies in the Mediterranean belt of rainy winter and dry summer, but the rainfall is so scanty (less than seven inches a year)³ that irrigation of the fields is required in order to ripen the grain. When properly irrigated the Plain of Shinar is prodigiously fertile, and the chief source of wealth in ancient Shinar was agriculture.

Earliest Important Civilization in the Valley of the Two Rivers: The Sumerians

Excavation has shown that the earliest important civilization in the Valley of the Two Rivers was developed by a non-

¹ Since early Babylonian days the rivers have filled up to the Persian Gulf for one hundred and fifty to one hundred and sixty miles, and the gulf is so much shorter at the present day.

² The current impressions of the cultivable area of Babylonia take no account of the fact that the Babylonian plain was once much shorter than it is now, nor of the further fact that on the north of it Mesopotamia is a desert, which, moreover, does not belong to Babylonia.

³ Based on British reports for the thirty-seven years from 1887 to 1924.

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Semitic people. Their race, however, has not yet been determined. They are called Sumerians, for that portion of the Tigris-Euphrates Valley over which they dominated was called Sumer. Probably before 3500 B.C. the Sumerians had begun to reclaim the marshes at the head of the Persian Gulf. Eventually their settlements of low mud-brick huts extended from above modern Baghdad to the mouths of the Two Rivers,



FIG. 54. ANCIENT BABYLONIAN SEEDER, OR MACHINE PLANTER

The seeder is drawn by a yoke of oxen, with their driver beside them. Behind the seeder follows a man holding it by two handles. It is very pointed and evidently makes a shallow trench in the soil as it moves. Rising from the frame of the seeder is a vertical tube (a) on the top of which is a funnel (b). A third man walking beside the seeder is shown dropping the grain into this funnel with one hand; with the other he holds what is probably a sack of seed grain suspended from his shoulders. The grain drops down through the tube and falls into the trench made by the seeder. The scene was carved on a small stone seal. (After Clay)

especially along the Euphrates, for the banks of the Tigris were too high for convenient irrigation.

The Sumerians learned to control the spring freshets with dikes, to distribute the waters in irrigation trenches, and to reap harvests of grain. They were already cultivating barley and wheat. They possessed cattle as well as sheep and goats. These animals played such an important part in the life of the Sumerians that one of their important goddesses had the form of a cow, and they believed that she protected the flocks and herds. Recently discovered sculptures in her temple near Ur show us interesting pictures of the dairy industry among

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the Sumerians. Oxen drew the plow, and oxen or asses¹ were harnessed to the *wheeled* carts and chariots. Very serviceable chariots with solid built-up wooden wheels fitted with leather or copper tires are pictured in the sculptured reliefs, and fragile remains of them are found in excavation.

Metal was introduced into Sumer at an early date, and the Sumerians were competent metal-workers. They knew how to hammer and to cast copper. Certain of their tools contain such a high percentage of tin that it is thought they had discovered how to harden copper into bronze at a fairly early period. Out of copper they made utensils, weapons, implements, toilet articles, and cult figures. Other metals commonly used were gold, silver, and lead.

Agriculture and cattle-breeding produced most of the wealth which formed the basis of Sumerian life. The Sumerians were, moreover, not slow to develop crafts, using therefor not only the resources at hand but also importing raw products from other places. Wool from the flocks made possible the development of weaving and the production of woollen clothing, although the kilt or skirt which the Sumerians are commonly represented as wearing was probably of sheepskin. With metal-work, woollen goods, and natural products such as dates and grain, active trade was developed with other countries of Western Asia. Indeed, there is evidence that this trade finally extended west to the Mediterranean and east to the lower valley of the Indus River.² The trade connection with the east is

¹ There is a strangely different draft animal on some of the Sumerian monuments which has been identified variously as horse, mule, and Asiatic wild ass (onager).

² Recent excavations, made by Sir John Marshall, acting for the Archaeological Survey of India, in the lower valley of the Indus River, in Punjab and in Sindh, have uncovered remains of an early civilization, reaching back to at least 2500 B.C. Here were towns with houses of burnt brick, some at least two stories high. There were bathrooms in the houses and a very elaborate system of drainage. Draft animals drew two-wheeled carts, and tamed elephants were used as burden-bearers. While the economic basis of the Indus Valley civilization was apparently agricultural, the crafts also were flourishing. Metal-workers made copper tools, hardened if necessary by admixture of tin, as well as vessels and vases of silver. Glazed ware showing some degree of skill was produced. Beautifully cut seals inscribed with picture signs testify to the possession of

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conclusively proved by the finding of seals, pots, and beads of Indus Valley manufacture in the ruins of ancient cities of the Plain of Shinar. In the west the commerce from the Tigris-Euphrates Valley overlapped with that of Egypt in the Eastern

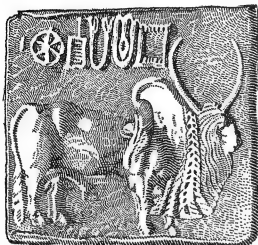


FIG. 55. A SEAL FROM THE LOWER INDUS VALLEY (THIRD MILLENNIUM B.C.)

This tiny paste seal, only a little over an inch square, is the finest work of art yet found by the Indus Valley excavators. It may also be considered one of the outstanding small masterpieces produced by ancient craftsmen. Above the perfectly modelled zebu, or Brahmani bull, is an inscription in a picture writing which has not yet been deciphered. (Drawing from photograph by Marshall)

an almost imperishable pottery tablet. On the earliest surviving specimens of these tablets we can still recognize the original pictures which made up the writing. The instrument with which these signs were traced on the clay we call a *stylus*. Some styluses were probably made of a strip split from a hard, reed-like bamboo, but there may have been others of bone or wood.

writing. These Indus Valley people were furthermore occupied to a great extent with trade. Their caravans must have passed westward regularly over the hills of Baluchistan, where similar settlements have been found; and archeological finds in Western Asia have established that this traffic finally extended into the Northwest Quadrant.

Mediterranean and may have extended to Egypt itself. Some intercourse between the Two Rivers and Egypt is suggested by the possession in common of certain man-made devices and peculiar forms of craft-work, as, for instance, the pear-shaped war mace, the cylinder seal, and the use of balanced animal figures in decorative art.

Trade and government very early led the Sumerians to make records scratched in rude pictures, perhaps with the tip of a reed, on the flattened surface of a pat of soft clay. When dried in the sun, such a clay record became very hard, and, if well baked in an oven, it became













































| | <i>A</i> | <i>B</i> | <i>C</i> | <i>D</i> | <i>E</i> |
|----|---|---|---|---|--|
| | <i>Original pictograph</i> | <i>Pictograph in position of later cuneiform</i> | <i>Early Babylonian</i> | <i>Assyrian</i> | <i>Original or derived meaning</i> |
| 1 |  |  |  |  | bird |
| 2 |  |  |  |  | fish |
| 3 |  |  |  |  | donkey |
| 4 |  |  |  |  | ox |
| 5 |  |  |  |  | sun day |
| 6 |  |  |  |  | grain |
| 7 |  |  |  |  | orchard |
| 8 |  |  |  |  | to plow to till |
| 9 |  |  |  |  | boomerang to throw to throw down |
| 10 |  |  |  |  | to stand to go |

FIG. 56. DIAGRAM SHOWING PICTORIAL ORIGIN OF TEN CUNEIFORM SIGNS

(Compiled and drawn by Professor Arno Poebel)

We may see a writer holding a stylus in Fig. 65. The writer did not incise the lines of his picture or scratch them in; but in making a single line he impressed one corner of the tip of the stylus into the soft clay, and then raised it again to impress another line in the same way. Owing to the oblique tilt of the stylus, as well as its shape, each line thus made was wider at one end than at the other, and hence appeared triangular or wedge-shaped, thus  or . Finally every picture or sign written with such a stylus came to be made up of a group of wedge-shaped lines like , which was once a stalk of grain, or , once a foot (Fig. 56, 6 and 10). We therefore call the system *cuneiform* (from Latin *cuneus*, meaning "wedge"), or wedge-form writing. Pictures made up of these wedge lines became more and more difficult to recognize, until all resemblance to the earlier pictures finally disappeared.

Sumerian writing finally possessed about six hundred signs. These included ideograms and phonograms, the former representing ideas or things, and the latter representing sounds. The phonograms were used to denote syllables. To the combination of phonograms forming certain words, often ideograms were added as determinatives. The Sumerian system never developed an alphabet of the letters which made up the syllables. That is, there were signs for syllables like *kar* or *ban*, but no signs for the letters *k* or *r*, *b*, or *n*, which made up such syllables. Hence we cannot insert here an alphabet, as we did in discussing Egyptian writing.¹

These clay records show us that in measuring time the Sumerian scribe began a new month with every new moon, and he made his year of twelve of these moon-months. As twelve such months fell far short of making up a year, the scribe slipped in an extra month whenever he found that he had reached the end of his calendar year a month or so ahead of the seasons. This inconvenient and inaccurate calendar was inherited by the Jews and Persians, and is still used by the oriental Jews and Mohammedans. As in Egypt the years themselves were not numbered, but each year was named after some important event.

¹ See pp. 223-226 for the story of how cuneiform was deciphered.

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The Sumerians used a system of enumeration which was a mixture of the decimal and sexagesimal. There were signs for units, tens, and sixties. These signs were placed according to values just as we place our numerals, but in the order of units, tens, sixties, instead of units, tens, hundreds. There was no sign for zero. The leading unit of weight was a *mina*, divided into sixty *shekels*, and sixty minas made one *talent*. These measures were used in the ancient world up into Greek times. The mina had the weight of our pound, and traffic with the East at last brought this measure of weight to us.

Sumerian life and culture radiated from the towns. The most important portion of the Sumerian town, and indeed the nucleus of its civilization, was the temple inclosure. Surrounded and protected by a massive wall were places of worship, temple storehouses, and business offices. Here ruled a wealthy priesthood. Assisted by scribes, they rented and cared for temple property. The temple served also as a bank. Money was loaned by the priests in the name of the god, and interest was exacted, likewise in his name.

Rising high above the other buildings in the temple inclosure was the tower-temple, which was in general shape almost a cube, though it tapered toward the top. Three lofty flights of steps led upward and converged on a door about halfway up the front of the building. There is evidence that there were sometimes several terraces, which may have been covered with soil and planted with trees, forming on different levels pleasant roof gardens. On top of the tower was a square temple with a court open to the sky and a holy place behind it. Among the important tower-temples was the one built at Nippur as a sanctuary to Enlil the god of the air; and Nippur early became a holy place, greatly revered among all the Sumerian communities. As the tower-temples were built to slope upward much like mountains, and as the Sumerians called them "mountain-houses," it may have been that the peoples of the flat Plain of Shinar were trying to make for their gods fitting homes on artificial mountains. The tower-temple erected at Babylon in later times gave rise to the tale of the Tower of Babel (or Babylon), as preserved by the He-

brews. As a new architectural conception the imposing tower-temple of Babylonia was a great contribution to architecture.¹

Alongside the tower-temple was a low building serving as the temple proper. Here the arrangement was apparently very simple, consisting of a court and the sanctuary. To this sanctuary under the shadow of the tower-temple the peasant brought in food offerings of grain, dates, figs, oil, milk, honey, or animals. These things were doubtless placed on offering tables, and certain portions were probably consecrated before the god, or rather, before his cult statue. Various kinds of cult utensils and libation vessels have been found in the ruins of these temples, and from relief scenes of the period it would seem that ceremonies of symbolic import took place. For instance, a jar containing a palm branch and bunches of dates is often represented as being watered. This perhaps symbolized the vegetable life of the land, which the god maintained by the annual rise of the river. We may suppose that such rites were performed and such gifts were laid before the gods of earth and its vegetable life, of the air, the sky, or the sea, with the prayer that there might be plentiful waters and generous harvests, but with the prayer also for deliverance from the destroying flood which the god had once sent to overwhelm the land. Of this catastrophe the peasant's fathers had told him, and the tradition of the flood finally passed over to the Hebrews.

In one important matter of religion the Sumerians were

¹ The remains of these Babylonian tower buildings are very scanty, and there has been much difference of opinion regarding the proper form of restoration. Just at the beginning of the World War there was rediscovered and published a late cuneiform tablet which gives the dimensions of the tower-temple at Babylon (Tower of Babel). Koldewey, the excavator of Babylon, who had found there the square base of the temple and the lowermost ends of the three stairways, was led thereupon to make a new restoration of the tower-temple. He was further influenced by the discovery of three similar stairways, preserved for a large part of their height, at Ur where excavations were being made by the Anglo-American expedition under C. L. Woolley. Professor Koldewey died early in 1925, but his representatives have kindly consented to the publication of his restoration of the tower of Babylon in this book (Fig. 70). An excellent restoration of the tower-temple of Ur has also been made by Woolley and his colleagues.

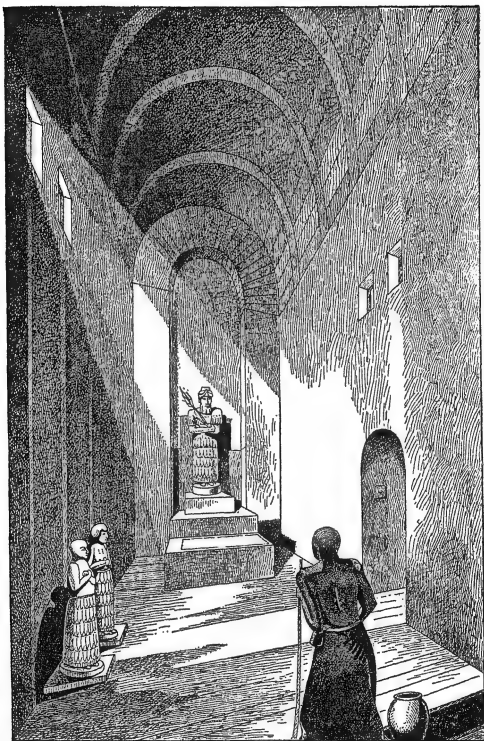


FIG. 57. INTERIOR OF A BABYLONIAN TEMPLE OF THE THIRD MILLENNIUM B.C.

(Excavated by the Oriental Institute of the University of Chicago; above drawing after reconstruction made by Seton Lloyd)

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very different from the Egyptians. The dead were often buried in the town, under the court of a house or under the floor of a room, although cemeteries outside a town were not unknown. Of the next world, they had only vague and somber impressions, as a gloomy place of darkness and dust beneath

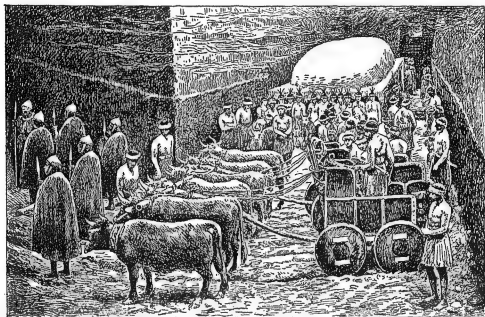


FIG. 58. HOUSEHOLD OF A PRINCE OF UR AWAITING DEATH AT THE DOOR OF HIS TOMB

The Anglo-American Expedition under C. L. Woolley, which excavated Ur, discovered the bodies of these men, women, and animals, with their equipment, lying at the door of the burial chamber of the prince's tomb. Directed by the archaeologists, the modern artist has here raised the dead by depicting them in the positions which they occupied at the last fatal moment before they were slain. Their slaughter was thought to insure their passing on into the next world with their ruler and continuing to serve him there

the earth, to which all men, both good and bad, descended. They shared in a widespread belief that when a man died he would need his household in the next world. Provision was sometimes made, therefore, that the dead man might not be obliged to live without his servants and animals in the life beyond the grave. Tombs of early princes of the city of Ur have disclosed the dead man's bodyguard, his servants, male and female, his draft oxen still yoked to the chariot—all lying

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slain at the door of the burial chamber, that they might accompany their master and continue to serve him after death.

Around the temple inclosure which, as we have seen, formed the nucleus of the town, extended the houses of the citizens—rectangular structures of sun-dried brick. Often there was in these dwellings a main chamber from which the other rooms were entered, and sometimes, in the later period, there was a central court open to the sky. The interiors were apparently cool and shaded—a very comfortable arrangement for the climate. Sufficient light came through clerestory windows or through high arched doorways opening into the courtyard. At first only a few hundred feet across, the town slowly spread out, although it always remained of very limited extent. Such a town usually stood upon an artificial mound which it is very important for us to examine.

The ordinary building material of the entire ancient world was sun-baked brick. The houses of the common people in the Near East even at the present day are still built of such bricks. The walls of the houses in course of time are slowly eaten away by the rains, till after a heavy rain an old house sometimes falls down. When this happens at the present day the rubbish is leveled off and the house is rebuilt on top of it. This has been the custom for thousands of years. As the process went on for many centuries, it produced a high mound of rubbish, on which the town stood. Many a surviving oriental town still stands on such an ancient mound; but there are other mounds which were long ago abandoned. Mounds so formed are to be found in all the lands of the Ancient Near East, such as the mound of Troy in Asia Minor, that of Megiddo in Palestine, or of Elephantine in Egypt.

The clay tablets containing the household records, letters, bills, receipts, notes, accounts, etc., which were in the houses when they fell, were often covered by the falling walls, and they still lie in the mound. In the temples and public buildings the documents covered up were frequently important government records, while in the dwelling or offices of the ruler there were tablets containing narratives of wars and conquests. Sometimes the ruler placed accounts of his erection of temples

or palaces, records of his victories and other great deeds, deep in the foundations of his buildings, in order that later rulers might find them. Besides all these written records, many articles of household use, or sculptured works of art, still lie buried in the mounds. Here, too, are the gaunt and somber remains of the early Babylonian buildings themselves. But, unfortunately, stone was so little used in these town buildings that they have generally fallen into complete ruin. Nevertheless, a city mound is a rich storehouse of ancient Babylonian civilization.

Indeed, the ruins of the ancient Sumerian cities reveal to us the life which filled the once busy streets, now sleeping under the silent mounds. We see that the most important class of citizens in the town were the free landowners, who worked their lands with numerous slaves and carried on trade by caravans and in small boats up and down the river. Over these free, middle-class folk were the officials and priests, the aristocrats of the town. Such a community, owning the lands for a few miles round about the town, formed the political unit, or the state, which we call a city-kingdom. Beginning before the third millennium B.C., the written documents and other monuments enable us to follow the life and progress of these early Sumerian city-kingdoms for some four centuries.

In spite of oppressive and dishonest taxation the Sumerian town owed much to its ruler. Besides his religious duties, which were many and varied, the city ruler was particularly active in time of war and in matters connected with irrigation. The irrigation canals and dikes required constant repairs. The planting and the harvesting of the fields would have stopped and the whole community would have starved if the king had ceased his careful supervision of the irrigation system and the water supply had been cut off.

As to war, we can watch more than one of these city rulers marching out at the head of heavily armed troops marshaled in massive phalanx, or charging the enemy in heavy four-wheeled chariots. We find here among the Sumerians the earliest highly developed art of war in the history of man. When the townspeople heard that a neighboring city-kingdom

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was trying to take possession of a strip of their land, they were glad to follow their king's leadership in order to drive out the invaders. As such occurrences were common, the early history of Sumer was largely made up of the ever-changing fortunes of the city-kingdoms in war. It is therefore more or less futile

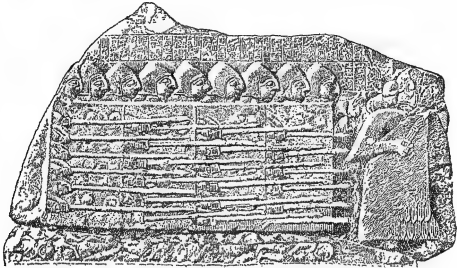


FIG. 59. A SUMERIAN CITY KING LEADING A PHALANX OF HIS TROOPS

The king himself, whose face is broken off from the stone, marches at the right, heading his troops, who follow in a compact group. This is the earliest example of grouping men together in a mass, forming a single fighting unit, called a phalanx. It was thus the first chapter in the long history of the art of war, and it took place in Asia. Such discipline was unknown at this time in Egypt. These Sumerian troops have their spears set for the charge, but they carry no bows. Tall shields cover their entire bodies, and they wear close-fitting helmets, probably of leather. They are marching over dead bodies (symbolical of the overthrow of the enemy)

to discuss the political history of Sumer during the early period.

There do exist fragments of king-lists for some of the Sumerian city-kingdoms. These lists presumably record the names of the rulers in those cities which were supposed to have succeeded each other as the dominant power in the plain which became Babylonia. It is unlikely, however, that we can accept the continuity as set down, for it is probable that often two or more cities were all powerful in a limited district during the same period. Moreover the length of time assigned to individual reigns is incredibly long. Although these records are

thus highly inadequate, they have been given a certain amount of authenticity by archeological discoveries at Ur, Uruk, Kish, Lagash, Nippur, Adab, and elsewhere. Let us take, for example, Ur, which is accredited in the king-lists as being the third dominant city-kingdom after the Flood; the two former being Kish and Uruk. Excavation at Ur and Nippur has uncovered inscriptional material referring to rulers of Ur whose names are also found in the king-lists for this period. The first king of the group was Mes-anni-padda. His son A-anni-padda built the little temple of the cow-goddess in a suburb of Ur and recorded that fact on a marble foundation tablet. Four of Mes-anni-padda's descendants followed him in power. This line of five kings is called the First Dynasty of Ur.

The Anglo-American expedition, excavating on the site of the ancient city of Ur, uncovered evidences of a remarkable civilization developed at a very early date. Far down beneath the accumulated rubbish of fallen buildings were discovered tombs which must have been built for persons of exalted rank, possibly local rulers. Here were found the burials which had been accompanied by human sacrifice (p. 130). Stone and brick both were used in the construction of the tombs, and the splendor of the mortuary equipment rivaled that of the tombs of Egypt. One of the princes wore a magnificent head-dress of heavy sheet gold wonderfully chiseled with the goldsmith's graver. A solid-gold dagger hung at his belt in a golden sheath richly wrought in elaborate openwork. Golden bowls which had adorned his dining-table in this life were placed beside him in the tomb. These works of the goldsmith disclose remarkable skill and craftsmanship, as well as refinement of design.

At the temple of the cow-goddess the kings of the First Dynasty were already able to adorn the place with impressive works of sculpture. On the platform before the building stood vigorous figures of bulls cast in copper; while the front entrance itself was guarded by a splendid lion-headed eagle with outspread wings hovering over a pair of stags, the whole fashioned also of copper. A decorative band crossing the front of

the temple was made up of dairy scenes with the herdsmen milking and the dairymen straining milk and making butter. This frieze was originally mounted on a plank, edged above and below with a strip of copper. The figures themselves were carved from pieces of shell or limestone and mounted in a thin layer of black bitumen which filled the space between the strips of copper. These larger figures employed in the exterior decoration of a building are not so fine, of course, as the work of the Sumerian goldsmith or lapidary, but the sculpture shows artistic conception and much technical skill.

The art of the lapidary was developed to a high degree of excellence in the Sumerian cities because of the demand for personal seals. Instead of signing his *name* to a clay-tablet document the early Sumerian made with his seal an impression on the soft clay. The earliest seals were stamp seals and varied as to form. Some were round or oval, others rectangular or square. Often the smooth slightly convex back was carved in the shape of an animal. After a



FIG. 60. SILVER VASE OF A SUMERIAN CITY KING

This vase is adorned with two broad bands of engraving extending entirely around it. They furnish an excellent example of early Sumerian decorative art. In the broader band we see a lion-headed eagle clutching the backs of two lions, which in their turn are biting two ibexes. This balanced arrangement of animal figures was one of the great creations of Sumerian art. Such symbols, made up of balanced pairs of animal figures, later passed over to Europe, where they are still used in decorative art and in the heraldic symbols or arms of the kings and nations. The eagle appeared in the arms of Austria, Prussia, and other European nations, and finally reached us as our "American" eagle, really the Sumerian eagle of five thousand years ago. (Musée du Louvre)

time a seal in the form of a roller or cylinder became common and finally superseded the stamp seal. This cylinder seal was engraved with beautiful pictures, and sometimes also bore the owner's name. The impression left by the stamp or roller in the clay served, of course, as a signature. The early Sumerian lapidaries soon became masters of their craft, and their influence has not yet disappeared from our own decorative art.

Sumerian *history*, as now known, really begins with the period to which belongs this recently discovered early civilization of Ur. Inscriptional material now invests Mes-anni-padda with a certain historical reality, which we cannot apply to any king recorded in the king-lists as having ruled previously. There were in Sumer probably several contemporary cities whose cultural progress paralleled that of Ur. Indeed, excavation at Lagash has uncovered a series of important monuments of the same character as those of the First Dynasty at Ur. As a ruler of Lagash claims to have subdued Ur, it may be that the downfall of the First Dynasty was caused by war with Lagash. It is stated in the king-lists, however, that the "kingdom of Ur passed to Awan," and the rulers of Lagash are ignored entirely in the king-lists. Awan was in Elam, and it may have been that Ur was now under foreign domination. The reconstruction of the early history of the Plain of Shinar is thus extremely difficult. It is evident that we shall not be able to bring order out of the present confusion until more of the lost Sumerian cities are recovered by excavation. Enough digging has been done to show us that all of the city-kingdoms passed through periods of strife when their territory was invaded and despoiled. It would seem, moreover, that in most instances the peaceful intervals were spent in preparation for an attempt at recovery of the lost supremacy.

These internecine struggles of the Sumerians were brought temporarily to an end by the appearance of a Semitic conqueror. The nomads of the desert had been drifting into the Plain of Shinar for centuries. Some of them probably came down the Euphrates from the northwest, for a large number seem to have taken up their habitation in the narrow strip of land between the Tigris and Euphrates, where the two rivers

THE FIRST SEMITIC TRIUMPH

are only some twenty miles apart. This northern portion of the plain was finally called Akkad, and the Semitic settlers there bore the name of Akkadians. Akkad occupied a very strong commercial position on the main road from the two rivers to the eastern mountains, and its trade always brought it prosperity.

The First Semitic Triumph: The Age of Sargon

In the twenty-sixth century B.C. there arose in Akkad a Semitic conqueror named Sargon. So skillful in war was he that he succeeded in scattering the compact Sumerian spearmen, and making himself lord of all the Plain of Shinar. The old Sumerian city-kings were defeated, and the Sumerian towns down to the mouths of the Two Rivers submitted to him. He even embarked his troops on the Persian Gulf in his attack on Elam. He led his swift Akkadian archers from the eastern mountains of Elam westward up the Euphrates to the shores of the Mediterranean. There Sargon possibly dispatched ships to conquer the island of Cyprus, and may even have come into hostile contact with the Pharaoh's galleys, which, we remember, were already moored in the harbors of the Phœnician cities. Some day chance may disclose to us the messages, written on clay tablets, which probably passed between the lord of the Euphrates and the lord of the Nile living in the splendors of his pyramid-city at Memphis. From the Mediterranean Sargon seems to have pushed northward into eastern Asia Minor in order to protect the trade which was already active between the silver-bearing regions of south-eastern Asia Minor and the merchants of the Two Rivers. Sargon was the first great leader in the history of the Semitic race, and he was the first ruler to build up a powerful nation in Western Asia, reaching from Elam on the east to the Mediterranean and far up the Two Rivers toward the west and north. His splendid conquests made an impression upon Western Asia which never faded, in spite of the fact that a serious revolt brought his reign to an end. His conquests were resumed by his grandson Naram-Sin who even extended them and left his monuments on the upper Tigris.

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Upon entering the Fertile Crescent, the Akkadians had found it necessary to make significant changes in their manner of life. The once wandering shepherds had dropped their unsettled life and had taken up fixed abodes. We may best picture the change if we say that they forsook their tents and built houses of sun-dried brick, which could not be picked up every morning and pitched somewhere else at night. It is interesting to note that the official residence of a local city ruler under the Akkadian kings has been recently excavated at Eshnunna. This was a pretentious building with two courtyards. It would appear that the private quarters of the prince had an entrance-hall, an anteroom, rooms for attendants, reception-room, bedroom, toilet, and bath. The entire palace was served by an elaborate system of sewage, the main channel of which was vaulted with baked brick. In some of the Akkadian houses there have been found terra-cotta window grilles and arched doorways. Architect's plans on clay tablets further evidence the Akkadian interest in building.

As the Akkadians had at first no system of writing, they used the Sumerian wedge-form signs to write their Semitic tongue. Indeed, it was in the Tigris-Euphrates Valley that a Semitic language was written for the first time. The Akkadians had adopted also the Sumerian calendar, weights and measures, systems of numerals, and business methods. With the arts of peace the Akkadians gained those of war. They learned to make helmets of leather and copper weighing over two pounds. The helmets of the Sumerians are the earliest-known examples of the use of metal as a protection in war. From such beginnings as these were to come the steel-clad battleships and gun turrets of modern times.

Among other things the Akkadians received inspiration from Sumerian sculpture. The triumphal stela of Naram-Sin (found at Susa, but now in the Louvre) belongs among the real triumphs of art in the ancient world. It is especially interesting as the first great work of art produced by the Semitic race. The Akkadian lapidaries soon rivaled their Sumerian teachers in seal-cutting. It is interesting to see, however, that the emphasis was laid by the Akkadian artists rather on the

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precise rendering of detail than on the decorative scheme which had so interested the Sumerians.

Thus the victorious Akkadians had adopted the civilization of the conquered Sumerians. The Semites mingled with the non-Semitic townsmen on the Babylonian plain, much as Norman and English mingled in England. In war the Sumerian continued to serve in the army with shield and lance along with his Semitic lord carrying only the bow, and in peace the Semitic nobleman could not do without the deft Sumerian clerk.

Union of Sumerians and Semites: The Kings of Sumer and Akkad

The line of Sargon ruled for about a century and a half. In view of their foreign military successes, it is interesting to note that the Akkadian kings were unable to prevent intrigue and dissension in the court group. The period is marked by revolts and even assassination. At last there were so many claimants to kingship that when the scribe of the king-lists came to record the events of the period, he could only write down the despairing phrases: "Who was king? Who was not king?" To add to the confusion the peoples from the Highland Zone again descended upon the unhappy land. Finally these invaders were driven out, and the Sumerian cities of the south were able to recover control of the country not long after 2300 B.C. Eventually the reconstructed ancient city of Ur gained leadership. But the Semites, who had been a part of the population of the Babylonian plain for centuries, were active in the new organization, and many local rulers bear Semitic names. The new nation was called Sumer and Akkad. It prospered greatly, and during this period the kings built up and raised to its highest level the civilization which we call Babylonian.

The period of the Kings of Sumer and Akkad may be summed up as a century of prosperity under the leadership of Ur, followed by nearly two centuries of decline under the successors of Ur. While excavation has recovered little of the official records of Ur, we learn, nevertheless, that there were

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conquests northward up the Tigris, including even Assyria, which appears *in this connection for the first time in history*. Apparently military expeditions were also made eastward into Elam and westward up the Euphrates, where the western Semites known as Amorites were now appearing.

These conquests brought a large area of Western Asia under more effective political control than ever before. One of the important results was the greatest development of trade that Western Asia had thus far seen. In the Stone Age we know that men traded in amber and flint and other natural products. With the development of agriculture, measures of barley or wheat served as a convenient scale of values. If A bought from B a river boat worth twenty measures of barley, he might offer in payment an ox worth fifteen measures, and he would then pay in actual grain besides the ox only five more measures of barley. Gradually the increase in the amount of precious metals made them a more convenient medium of exchange and basis of values. It was silver especially which was thus on the way to become money. As far back as the Pyramid Age the Egyptians were using rings of copper, and for larger transactions rings of gold of a given weight. Similarly, the Babylonians early began to use pieces of silver each weighing a shekel, or the sixtieth part of a pound (mina). When a silver shekel was shaped into a disk, it was only a trifle larger than a dime. It was now possible to give prices and values in weights of silver. The value of silver was about four of silver to one of gold, but as it became more plentiful it later greatly decreased in value.

This trade has left an enormous body of bookkeeping records in the form of clay tablets found by excavation in the ancient cities of the age. It was at this time that many of the business forms which we still use and which make business transactions a matter of record arose for the first time. Along with these grew up business and social habits and customs, which gradually came to be regarded as the only ones to be followed, and finally became laws controlling the life of the people.

Thus able to bring a wide region under orderly laws and

enjoying far-reaching trade connections, Ur rapidly gained wealth and power. The monument which was the chief result of that wealth was the temple-tower which the kings of Ur now built. Uncovered by modern excavation, this tower of Ur, erected in the twenty-third century B.C., is an impressive evidence of the prosperity of the city in this age.

Literary evidences of the civilization of Ur under the kings of Sumer and Akkad have thus far not been discovered in the ruins of the city. It is probable, however, that the flourishing literary development which we find going on later under her rivals had already begun under the rule of the kings of Ur. The tablets containing the literature of this age have been lost, but some of the school books and exercise tablets of the boys who were studying this literature at school have survived and are often our only copies of valuable literary works which have otherwise perished. In such a school there were clay-tablet treatises on grammar, dictionaries of terms, and lists of signs. The lad could study tablets on arithmetic and geometry, and he might even find on the shelves of the tablet library discussions on medicine and healing in which the only known cause of disease was an invasion of the human body by demons or evil spirits. There were also religious hymns, but the greater part of the real literature of the age was a series of stories and mythical tales.

In simple stories these men of Sumer and Akkad had now begun to answer those natural questions regarding life and death which always rise in the minds of early men. They told of the wonderful adventures of the shepherd Etana when his flocks were stricken with unfruitfulness and no more lambs were born. Etana then mounted on the back of an eagle and rose to the skies in search of the herb in which was the source of life. But as he neared his goal he was hurled to the earth again. This is the earliest tale of flying by man.

The dark mystery of death led to the story of the fisherman Adapa. When the south-wind goddess overturned his boat Adapa flew into a rage and broke her wing. Thereupon he was summoned to the throne of the Sky-god, whose wrath was at length appeased so that he offered to Adapa the bread and

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water of life. This would have made him immortal and destroyed death, but, suspicious and forewarned of danger, the unhappy Adapa refused the food and thus lost both for himself and for mankind the treasure of immortal life.

They told how the gigantic hero Gilgamesh also, after many mighty deeds and strange adventures, failed to gain immortal

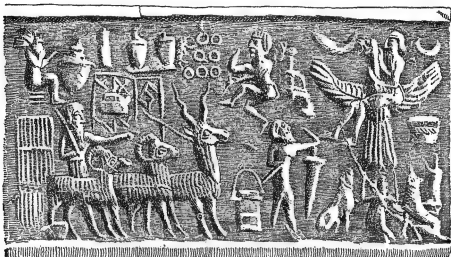


FIG. 61. THE FLIGHT OF ETANA TO THE SKIES

At the right Etana sits on the back of the flying eagle, with his arm around the bird's neck. Above him is the moon, while, below, two dogs look up after him, barking. At the left approaches a goatherd driving three goats; before them walks a man with hand upraised in wonder. All, including the goats, are looking up in amazement at the flight of Etana. Over the goatherd a potter is making jars, and at the right of his jars a squatting baker is making round loaves. The scene is carved on a cylinder seal, and our drawing shows the impression on the soft clay when the seal is rolled over it

life. Among all these heroes, indeed, there was but one who was granted endless life. Of him there was a strange tale, telling how, together with his wife he survived the great deluge in a large ship. Then the gods carried them both away to blessedness. But not even the *kings* of Sumer and Akkad were supposed to enter a blessed hereafter, much less the common people. Some of these stories of creation and flood were afterwards known to the Hebrews.

Mingled with touches from the life of both Sumerian and

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Semite, these tales circulated in both the Semitic and Sumerian languages. Most of them, however, were written in Sumerian and it was this old Sumerian tongue which was regarded as the more sacred. It later continued in use as a kind of sacred language, like Latin in the Roman Catholic Church today. The political supremacy of the old Sumerian towns was coming to an end, but religious stories were written in Sumerian centuries after it was no longer spoken.

The period of the Kings of Sumer and Akkad represent the highest level of the mixed Sumerian and Akkadian civilization—that civilization which we now call Babylonian. It was the classic age in the development of human life on the ancient Plain of Shinar, during which its essentially commercial character was stamped upon it. The power and splendor of Ur in this age were never forgotten, and later, when Hebrew civilization had arisen in Palestine, the Hebrews were very proud to trace back their ancestry to Abraham, believed by them to have been a citizen of Ur toward the close of the great period with which we have been dealing.

The Second Semitic Triumph: The Age of Hammurabi and After

Shortly after the beginning of the second millennium B.C. the united kingdom of Sumer and Akkad fell, and never again did the old Sumerian cities hold political leadership. The fall of Ur at the end of the twenty-third century was due not only to wars with the other city-kingdoms, but also to foreign invaders, who, apparently in collusion, broke through the frontier defenses in both east and west at the same time. In the east the Elamites seized the Sumerian cities, led captive the last king of Ur, and plundered the royal tombs of the city. In the west the new group of Semites, the Amorites, began an invasion of Akkad. Some of the Amorite leaders eventually assumed control in certain of the old towns in the north. In the middle of the twenty-first century B.C. one of these chieftains set himself up as ruler at Babylon, which was at that time a place of little importance politically. The Amorite chiefs at Babylon held the place for three hundred years and

made the city finally such an outstanding center of power and civilization that it gave its name to the old Plain of Shinar, which we may thenceforth properly call Babylonia.

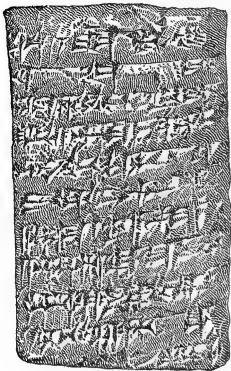


FIG. 62. A LETTER WRITTEN BY HAMMURABI, KING OF BABYLONIA

The writing, done while the clay was still soft, shows signs of the speed with which Hammurabi's secretary took down the king's dictation. The tablet has been baked. It was also inclosed in a baked-clay envelope bearing the address, but this has been broken off and thrown away. This letter orders a local governor to hear the appeal of an official who thinks himself unjustly defeated in law

The earlier Amorite kings of Babylon were not able at once to take possession of all Sumer and Akkad, and the struggle against the Elamites coming in from the east went on for a long time without a decisive victory. Following a century of such warfare, there came to the throne a king named Hammurabi (1948-1905 B.C.). He was sixth in the line of Amorite kings at Babylon. After Hammurabi had spent three decades steadily strengthening his position in the northern part of the Babylonian plain, he turned south and established his domination there by a great victory over the Elamite prince who held the southern cities in subjection. Hammurabi thus made his city of Babylon for the first time supreme throughout the land.

Hammurabi survived his triumph twelve years. While fighting and conquest did not wholly cease, nevertheless these years gave him opportunity to

devote himself to peaceful administration, in which he proved himself, as he had done in war, the ablest of his line. He was the second *great* Semitic ruler, as Sargon had been the first. Hammurabi now put forth his powerful hand upon the teem-

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ing life of the Babylonian towns, and with a touch he brought in order and system such as Babylonia had never seen before. Two chief sources of information have survived nearly four thousand years to reveal to us the deeds and the character of this great king: these are a group of his letters, and the splendid monument bearing his laws.

Hammurabi's letters afford us for the first time in history a glimpse into the busy life of a powerful oriental ruler in Asia. They disclose him to us sitting in the executive office of his palace at Babylon with his secretary at his side. In short, clear sentences the king begins dictating his brief letters, conveying his commands to the local governors of the old Sumerian cities which he now rules. The secretary draws a reed stylus from a leather holder at his girdle, and quickly covers the small clay tablet with its lines of wedge groups. The writer then sprinkles over the soft wet tablet a handful of dry powdered clay. This is to prevent the clay envelope, which he now deftly wraps about the letter, from adhering to the written surface. On this soft clay envelope he writes the address and sends the letter out to be put into the furnace and baked.

Messengers constantly hand him similarly closed letters. This secretary of Hammurabi is a trusted confidential clerk. He therefore breaks to pieces the hard clay envelopes in the king's presence and reads aloud to him letters from his officials all over the kingdom. The king quickly dictates his replies. The flood has obstructed the Euphrates between Ur and Larsa, and of course a long string of boats have been tied up and are waiting. The king's reply orders the governor of Larsa to clear the channel at the earliest moment and make it navigable again.

The king is much interested in his vast flocks of sheep, as if the nomad instinct had not altogether vanished from the blood of his line. He orders the officials to appear in Babylon to celebrate the spring sheep-shearing as if it were a great feast. The calendar has slipped forward a whole month in advance of the proper season (p. 126), and the king sends out a circular letter to all the governors, saying, "Since the year

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hath a deficiency, let the month which is now beginning be registered as a second (month of) Elul."

But he warns the governors that all taxes otherwise falling due within the next month are not to be deferred by this insertion. Delinquent tax gatherers are firmly reminded of their obligations and called upon to settle without delay. Prompt punishment of an official guilty of bribery is authorized, and we can see the king's face darken as he dictates the order for the arrest of three officials of the palace gate who have fallen under his displeasure. More than once the governor of Larsa is sharply reminded of the king's orders and bidden to see that they are carried out at once.

Many a petitioner who has not been able to secure justice before the board of judges in his home city is led in before the king, confident of just treatment; and none is disappointed. The chief of the temple bakers finds that royal orders to look after a religious feast at Ur will call him away from the capital city just at the time when he has an important lawsuit coming on. He easily obtains an order from the king postponing the lawsuit. The king's interest in the religious feast is here as much concerned as his sense of justice, for many of the letters which he dictates have to do with temple property and temple administration, in which he constantly shows his interest.

With his eye thus upon every corner of the land, alert, vigorous, and full of decision, the great king finally saw how necessary it was to bring into uniformity all the various and sometimes conflicting laws and business customs of the land. He therefore collected all the older written laws and usages of business and social life, going back to old Sumerian times. These he arranged systematically. He improved them or added new laws where his own judgment deemed wise, and he then combined them into a great code or body of laws. It was written, not in Sumerian, as some of the old laws were, but in the Semitic speech of the Akkadians and Amorites. He then had it engraved upon a splendid shaft of stone. At the top was a sculptured scene in which the king was shown receiving the law from the Sun-god. The new code was then set up in

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the temple of the great god Marduk in Babylon. This shaft has survived to our day, the oldest preserved code of ancient law. Fragments of other copies on clay tablets, the copies used by the local courts, have also been found.

Hammurabi's code insists on justice to the widow, the orphan, and the poor; but it also allows many of the old and naïve ideas of justice to stand. Especially prominent is the principle that the punishment for an injury should require the infliction of the same injury on the culprit—the principle of "an eye for an eye, a tooth for a tooth." Injustice often resulted. For example, when a house fell (p. 131) and killed the son of the householder, the guilty builder must also suffer the loss of *his* son, and the innocent son was therefore condemned to die. Marriage was already a relation requiring legal agreements between the man and his wife, and these are carefully regulated in Hammurabi's code. Indeed the position of women in this early Babylonian world, as in Egypt, was a high one. Women engaged in business on their own account, and even became professional scribes. They must have attended such a school as that described below (p. 150).

Thus regulated, the busy Babylonian communities prospered as

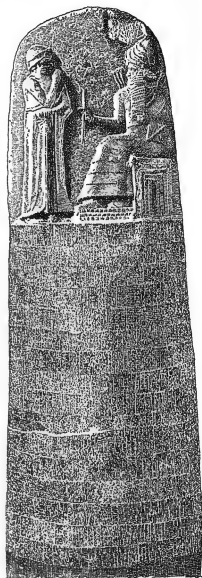


FIG. 63. THE LAWS OF HAMMURABI, THE OLDEST SURVIVING CODE OF LAWS

A diorite shaft nearly 8 feet high, bearing the laws, extending entirely around the shaft and occupying over 3600 lines. Above stands Hammurabi, at the left, receiving the laws from the Sun-god, seated at the right

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never before. Their products were chiefly agricultural, especially grain and dates; but they had also flocks and herds, from which they obtained leather and wool. The weaving of wool was a great industry, for woolen clothing was commonly worn in Western Asia. Bronze was employed in the making of tools and weapons. While iron was known, it was much too rare to play any part in industry. Iron for common use was still nearly a thousand years in the future.

A standing army kept the frontiers safe and quiet, and the slow donkey caravans of the Babylonian merchants, plodding from town to town, were able to penetrate far into the surrounding communities. They were so common on the upper Euphrates that a town there was called Harran (or Kharran) from the Babylonian word *kharranu*, meaning "journey." Many a courtyard was piled high with bales, each bearing a clay tag, or bulla, with the impression of the merchant's name. These clay seals, broken away as the bales were opened, are found today lying in the rubbish of the Babylonian towns, where the modern excavator picks them up, still displaying on one side the merchant's name and on the other the impression of the cord which bound the bale.

The bullæ and the clay-tablet bills which accompanied the bales had to be read by many a local merchant in the towns of Syria and beyond the passes of the northern mountains. Thus Babylonian cuneiform writing slowly made its way through Western Asia and the merchants of Syria and Capadocia in Asia Minor (p. 155) began to write bills and letters of their own on clay tablets. Hammurabi's commercial influence was widely felt in the west. The memory of his name had not wholly died out in Syria-Palestine in Hebrew days over a thousand years after his death.¹

The Babylonian merchants were a powerful class and were even called the "rulers" in some communities, but the temples with their large possessions were the center of business life. They controlled extensive lands, dealt in merchandise, and loaned money. Loans were common, though the rate of inter-

¹ See Genesis x, in which the name of Amraphel is commonly supposed to be a western corruption of Hammurabi.

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est was high: on silver, twenty per cent a year, payable in monthly installments. Silver had become so plentiful that it had decreased greatly in value. Gold was used sparingly, for it was twelve to fifteen times as valuable as silver.

Thus commercial interests were the leading influences in Babylonian life, even in religion. The temples, as we have said, had a large place in business life, and religion never proclaimed the rights of the poor and the humble or championed their cause against the rich and powerful. To be sure, the ritual of the temple contained some prayers which indicated a sense of sin and unworthiness. But the advantages of religion consisted in being able to obtain substantial benefits from the gods and to avoid their displeasure.

The people still worshiped the old Sumerian gods. The political leadership of Babylon had, however, enabled the men of that city to put their Semitic god, Marduk, at the head of all the gods, and in the old mythical stories they inserted the name Marduk where once the favored and ancient Sumerian gods had played the leading part. At the same time the great Asiatic goddess of love, Ishtar, rose to be the principal goddess of Babylon. She was later to pass over to the Mediterranean to become the Aphrodite of the Greeks.

Among the benefits granted by the gods was the ability to foretell the future. This art we call divination, and the priest who practiced it was a diviner. Already under the kings of Sumer and Akkad the skilled diviner could interpret the mysterious signs on the liver of the sheep slain in sacrifice, and his anxious inquirers believed that he could thus reveal the unknown future. He could note the positions of the stars and the planets, and he could also in this manner discern the decrees of the gods for the future. These practices later spread westward. We shall find the reading of the liver a common practice in Rome, and star-reading later developed under the Chaldeans into the art of astrology, and then later into the science of astronomy.

To train men for such temple service and to furnish clerks for business and government, schools were necessary. These were usually in or connected with the temple. A schoolhouse

of the time of Hammurabi has actually been uncovered with the clay-tablet exercises of the boys and girls of four thousand years ago still lying on the floor. They show how the child began his long and difficult task of learning to understand and to write some six hundred different signs.

The pupil's slate was a soft clay tablet, on which he could rub out his exercises at any time by smoothing off the surface with a flat piece of wood or stone. With his reed stylus in his hand, he made long rows of single wedges in three positions, horizontal, vertical, and oblique. When he could make the single wedges neatly enough, the master set him at work on the wedge-groups forming the signs themselves. Lastly, he was able to undertake words and simple phrases, leading up to sentences and quotations from old documents. One of the tablets found in the schoolhouse contains a proverb which shows how highly the Babylonians valued the art of writing. It reads: "He who shall excel in tablet-writing shall shine like the sun." Doubtless many a Babylonian lad was encouraged in the long and wearisome task of learning to write, by copying this enthusiastic sentiment.

Of the higher life of Babylon in this age as expressed in great works of art and architecture, very little has survived on the spot. Indeed, the city of Hammurabi has perished utterly. Not a single building erected by him now stands. Enough remains in other mounds to show us that some architectural principles which had been originated by the Sumerians were now further developed and commonly employed in building. As these forms have been transmitted to the modern world and still survive, they are of great importance. The principle of the arch, for instance, was used in the early royal tombs at Ur, and vaulted drains of the Akkadian period have been found. Private houses at Ur during the period of the Kings of Sumer and Akkad had arched doorways. By the time of the Assyrian Empire the arch had assumed a prominent place on the front of the palace. The chief architectural creation of early Babylonia was the tower-temple. With the tower-temple was evolved also the idea of employing the recessed panel as a relief for exterior plane surfaces. This wall decoration has

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been popular with builders in Mesopotamia since Sumerian times and it is seen rather often on brick buildings in the Western World. The early Babylonians made brick or wooden columns covered with mosaic, but the use of the column seems to have been limited.

Works of art from Hammurabi's period are scarce. The sculptured scene, on the diorite shaft inscribed with the code, which represents Hammurabi receiving the law from the Sun-god (Fig. 63) is a work displaying a certain fine dignity and impressiveness. But this scene shows us how Babylonian custom now muffled the human form in heavy woolen garments, so that the sculptor had little opportunity to depict the beauty of the human figure. Portraiture was scarcely able to distinguish one individual from another. The beautiful art of seal-cutting, the greatest art of the Babylonians, had noticeably declined since the wonderful works of Sargon's age. Although it was commercially so successful, yet in art the age of Hammurabi was already declining.

The decline in art was perhaps a prophecy of what was to come, for the Babylonian nation which Hammurabi had so splendidly organized and started hardly survived his death. A new group of invading peoples called Kassites¹ descended upon the Babylonian plain from the east. By gradual migration they filtered into the Fertile Crescent, especially after 1900 B.C., and settled in Babylonia. Hammurabi's successors seem to have been quite unable to keep them out. Just when the Kassite population had increased to an alarming extent, the Babylonians were unfortunately visited by another invading host. The Hittites advanced out of the northwest, and, moving down the Two Rivers, they captured Babylon and carried back the plunder of the city to their own country. This Hittite invasion was only a hurried raid; they did not remain in Babylonia, but when they withdrew, they had completely overthrown the last of the family of Hammurabi. Thus about 1750 B.C. the Kassites had no difficulty in making them-

¹ It was probably these Kassites who brought large numbers of horses into Babylonia, although the horse did not appear in Egypt until some centuries later (p. 96).

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selves masters of the country. Their triumph marked the end of old Babylonian progress in civilization. Until its revival under the Chaldeans Babylonia relapsed into stagnation so complete that it was rarely interrupted. Thus was concluded the first great chapter of history along the Two Rivers. The scene of the second chapter will carry us up the river valley to Assyria, where a small city-kingdom, once under Babylonian domination, was steadily developing into a world power.

CHAPTER VI

WESTERN ASIA: THE ASSYRIANS AND THE CHALDEANS

Early Assyria and Her Western Rivals

THE second chapter of history along the Two Rivers carries us up the river from Babylonia to the northeastern corner of the desert-bay. Here was an easily defended elevation possessing a natural strength unknown to the towns in the flat Plain of Shinar. It overlooked the Tigris on the east, and the desert on the west and south. The place was known as Assur, and it later gave its name to the land of Assyria.

Being in a highland region, Assyria enjoyed a climate much more invigorating than the hot Babylonian plain. It had many fertile valleys winding up into the eastern and northern mountains, where rival cities were already in existence. It was a region where an occasional promontory of rock furnished quarries of limestone, alabaster, and harder stone. Herein Assyria differed greatly from Babylonia, which was without building-stone and had therefore developed only architecture in brick. These eastern valleys were green with rolling pastures and billowing fields of barley and wheat. Herds of oxen and flocks of sheep and goats dotted the hillsides. Asses served as the chief draft animals, and the horse was probably unknown in the beginning. Here flourished an agricultural population, although the Assyrians finally built up also industries and trade.

This population of the region north of Babylonia was not purely Semitic, but contained people of other tongues and probably also of different races and blood. By the third millennium B.C. there was already living at Assur a small settlement of Sumerians, whose works of art have been excavated there. At the same time the men whom we call Assyrians were already there. It is not wholly certain whence they came or whether they were of pure Semitic race, but they spoke a Semitic language closely related to that which was spoken at Akkad, where we have already seen the Semites, led by Sargon, forming the first powerful Semitic kingdom by the middle of the third millennium B.C. The men of Assur at first formed a tiny

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city-kingdom like those of their Sumerian neighbors in the south. It is evident that they were in close contact with the Sumerian towns, for they adopted many of the conveniences of Sumerian civilization. They used the cuneiform signs in writing, and Assyrian sculpture and architecture reveal influences from the Babylonian plain.

While most of the *early* civilization of Assur thus came from the south, the little city-kingdom was equally exposed to influences from the north and west. In Asia Minor there were in the second millennium B.C. hostile groups of Hittites, some of whom gradually ventured eastward to the Two Rivers. Early Assur was perhaps at times ruled by outsiders from the west, only to fall back again under the control of the south led by Sargon, the kings of Ur, Hammurabi, or some other ruler of Babylonia. Thus obliged, for over a thousand years after Sargon's reign, to defend their uncertain frontiers against their neighbors on both north and south, the Assyrians were toughened by the strain of unceasing war. The Assyrian state was therefore built up around the army—at first, militia and then a standing army, which became the chief strength of the government. This military state thus developed into a stable and powerful organization, unshaken by the rivalries of city-states such as those which so often weakened and finally overthrew Babylonia. Freed from internal struggles, Assyria could muster her undivided strength and direct it against her foreign foes. The Assyrian kings early introduced the horse and added chariots to their army, which finally became the strongest military force the early world had yet seen.

At the same time commerce and traffic with surrounding countries brought wealth and power to the young nation. Attracted by the silver-mines of southeastern Asia Minor (Cilicia), Assyrian merchants were drawn into commerce with the west. Assur thus became an important station on the trade route connecting the peoples in the mountains east of Assyria with those of the west. The Assyrian traders had learned the forms of business which were so highly developed in Ur under its kings of Sumer and Akkad. Settlements of merchants from the Two Rivers were established at various places in south-

EARLY ASSYRIA AND HER WESTERN RIVALS

eastern Asia Minor, in the region later known as Cappadocia. Here excavations have uncovered great quantities of business records in the form of cuneiform tablets like those of Assyria. They show us that these foreign merchants from the east continued to carry on business in Cappadocia for at least two hun-

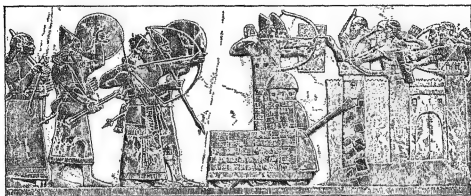


FIG. 64. ASSYRIAN KING ATTACKING A FORTIFIED CITY (NINTH CENTURY B.C.)

This relief, set up in the ninth century B.C., shows that the Assyrians had already developed siege machinery. The city at the right is protected by walls of sun-dried brick. The defending archers on the walls are trying to drive away a huge Assyrian battering-ram mounted on wheels (of which only the lower parts are visible, the upper parts being covered by the armor of the battering-ram). This machine is really an ancient "tank" with its front protected by metal armor plate. It carries a fighting tower as high as the city wall, and Assyrians in the top of the tower direct arrows and missiles against the defenders of the wall. Within the tank unseen men work the heavy beam of the ram, which is capped with metal and which is shown smashing a hole in the city wall. An observation tower with metal-covered dome and peep-holes shields the officer in command as he directs operations. In the rear is the Assyrian king shooting arrows into the hostile city. This scene is among the earliest Assyrian palace reliefs which have survived, and hence the artist's childish representation of men as tall as city walls

dred years, beginning sometime when the Kings of Sumer and Akkad were in power. We shall see later that these settlements from the east had an important part in carrying civilization westward. Found, as they were, lying in the towns of south-eastern Asia Minor, the clay tablets of the Assyrian merchants are for us today like milestones, marking the march of civilization from the Two Rivers toward southeastern Europe.

Access to the silver-mines of Cilicia greatly affected business

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and commerce, for silver rapidly displaced grain as a medium of exchange. There is some evidence that pieces of metal may have been stamped to indicate weight and, possibly, provenience. In the seventh century B.C. the Assyrian emperor Sennacherib compares the casting of certain bronze sculpture with the casting of half-shekel pieces, which seems to indicate that the Assyrians were casting half-shekel pieces before Sennacherib's time. Such specimens would be, of course, the forerunners of coined money.

Connection with the west was, therefore, of greatest importance to Assyria. Not only did Assur need access to the metals found in the west, but as an inland power it could not hope to rule Western Asia without access to the Mediterranean. Two serious obstacles lay between Assur and the western sea: *first*, the kingdom of Mitanni just northwest of Assyria; *second*, the wealthy trading states holding the harbor towns along the eastern coast of the Mediterranean. We must briefly examine these two obstacles, for they reveal two great racial movements that have shaped the history of the civilized world.

The ruling class in Mitanni was composed of a group of adventurers who seem to have been originally nomads from the northern grasslands. These northern nomads were the descendants of the first horse-breeders. Long before they reached the Fertile Crescent, and while they still dwelt on the northern grasslands, their forefathers had learned to train horses and drill them for use in battle with the war chariot. Some of these skillful horsemen, pushing southward and westward, easily subdued the population in the great western bend of the Euphrates. The art of horse-breeding had been carried so far by these people that a famous horseman among them, named Kikkuli, wrote a horse-breeder's guide. Part of this earliest horse-breeder's manual in clay-tablet form was excavated in the Hittite capital. Maintaining themselves on the Euphrates as the earliest known horse-breeding aristocracy, these horsemen made Mitanni a dangerous military state. The coming of the domestic horse was the beginning of a new age on the Fertile Crescent. When a squadron of chariots drawn by swift and heavy horses came thundering down upon the infantry

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soldiers, they were scattered like autumn leaves. Driving their terrible chariots, the lords of Mitanni were able to carry their conquests northwestward across the Hittite frontiers.

Mitanni lay right across the merchant roadways and caravan routes, leading from Assyria, and crossing the Euphrates to reach the west. But Mitanni was far more than a mere obstruction, for its lords soon invaded Assyria, and for a time held the Assyrians as a subject people. These horse-breeding nobles of Mitanni were like an advance guard in the great southward and westward movement of the Indo-European migration which we shall finally see stretching from India to the British Isles. We know that the nobles of Mitanni, who were kinsmen of our own ancestors and spoke a tongue related to ours, were in control by about 1500 B.C. as an Indo-European outpost occupying the middle of the Fertile Crescent. Some of their Indo-European kinsmen settled in Asia Minor among the Early Anatolians, and there we shall meet them later. For over a century these Indo-Europeans of Mitanni not only formed a serious barrier to Assyrian commerce on the west, but completely blocked the westward expansion of Assyria.

The second obstacle in the westward path of Assyria was the line of Phœnician cities along the eastern coast of the Mediterranean. We see in this situation the earliest illustration of the racial grouping which was to shape the later history of mankind—the Indo-Europeans on the north, the Semites on the south. While the earliest outposts of the Indo-Europeans were in the Hittite country of Asia Minor and in Mitanni, the westward expansion of the Semites had carried them to the eastern shores of the Mediterranean. Here the harbor towns of the former Semitic nomads had become a fringe of wealthy city-kingdoms carrying on an extensive commerce by sea. Their merchant fleets were finally to give them the merchantile leadership of the whole Mediterranean. These Phœnician cities proved obstinate enemies of the Assyrian kings.

After the sixteenth century B.C. the Assyrians had to face also the dangerous hostility of a new Semitic migration which was both commercial and political. Most important of these

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new peoples were the Arameans, who by 1200 B.C. had established a group of flourishing kingdoms in the west, particularly in Syria.¹ Here, under the influence of the Hittite civili-

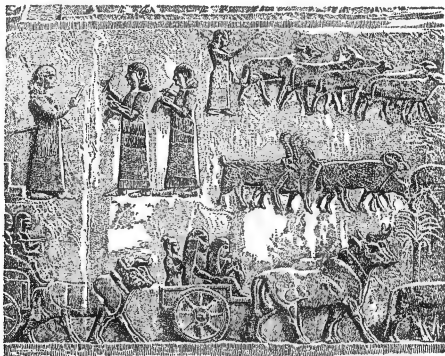


FIG. 65. ASSYRIAN AND ARAMEAN SCRIBES RECORDING THE PLUNDER TAKEN FROM A CAPTURED ASIATIC CITY (EIGHTH CENTURY B.C.)

The captive women and children ride by in ox-carts on their way to slavery in Assyria, and a shepherd drives off the captured flocks. At the left an Assyrian officer reads from a tablet his notes of the spoil taken in the city. Two scribes write as he reads. The first (in front) holds in his left hand a thick *clay tablet*, from which he has just lifted the stylus, grasped in his right hand, as he pauses in his writing. The other scribe holds spread out on his left hand a *roll of papyrus*, on which he is busily writing with a pen held in his right hand. He is an Aramean, writing Aramaic with pen and ink. We see here, then, the two different methods of writing practiced at this time in Western Asia—the outgoing Asiatic clay tablet and the incoming Egyptian paper, pen, and ink

zation on one side and Egyptian on the other, the Aramean kingdoms of Syria built splendid royal cities and luxurious palaces. South of the Arameans, in Palestine, the Hebrews.

¹The Arameans are often called Syrians, and the region north of Palestine is commonly called Syria. These two names, Syria and Syrians, are not to be confused with Assyria and Assyrians.

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another Semitic group, were seizing land and settling down. At the beginning of the first millennium B.C. these two, the Hebrews and the Arameans, together with the Phœnicians on the coast, held the greater part of the western end of the Fertile Crescent, and Assyria was effectively cut off from the Mediterranean.

The energetic Aramean merchants extended their business far beyond their own kingdoms. They pushed their caravans all along the shores of the desert-bay, even as far north as the sources of the Tigris, and they finally controlled the commerce of Western Asia. Their bronze weights found in the ruins of Nineveh show us how common were the Aramean merchants in the Assyrian market-places. Like their kinsmen the Jews in modern civilized states, although they were not organized as a single nation, they were the great commercial leaders of the age.

The Arameans were a highly civilized race. By 1000 B.C., and probably several centuries earlier, they were using *alphabetic* writing, which they had borrowed from the Canaanites or the Phœnicians. It was the earliest system of writing known which employed *exclusively* alphabetic signs. Along with the alphabet the Arameans received the Egyptian pen and ink also, conveniences indispensable in the use of the new alphabet. As the Babylonian caravans had in earlier times carried cuneiform tablets throughout Western Asia, so the Aramean caravans, with their bills and receipts, began to carry through the same region the alphabet which was to displace cuneiform signs. Thus the Phœnician-Aramean alphabet spread throughout Western Asia. It passed down the Euphrates to Persia and, penetrating to the frontiers of India, even furnished the East Indian peoples with their Sanskrit alphabet. From India westward every alphabet of civilization has descended from this oriental alphabet thus carried so far by the Arameans.

The Aramean merchants of course carried their language (called *Aramaic*) with them, and Aramaic gradually became very common all around the desert-bay. Indeed, in the old Assyrian communities the people who spoke Aramaic finally outnumbered the citizens of Assyrian speech. When an 'Ara-

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mean received a cuneiform tablet recording business matters in the Assyrian language, he sometimes took his pen and marked it with memoranda in Aramaic. Assyrian tablets bearing such notes in Aramaic have been found in the ruins of Assyrian buildings. Indeed public business was finally carried on in both languages, Assyrian and Aramaic. Aramean clerks were appointed to government offices, and it was a very common thing for an Aramean official of the Assyrian Empire to keep his records on papyrus, writing with pen and ink on a roll, while his Assyrian companion in office wrote with a stylus on a clay tablet.

Aramaic finally became the language of the entire Fertile Crescent. It displaced its very similar sister tongue, the Hebrew of Palestine, and thus the merchant tongue of the Arameans, many centuries later, became the language spoken by Jesus and the other Hebrews of his time in Palestine. It penetrated even to the Hittites, and a tombstone with an Aramaic inscription was found at Sardes in western Asia Minor. In the end this widespread commercial civilization of the Arameans left more lasting influences behind than even the powerful military state of the Assyrians. Unfortunately, the Aramean city mounds of Syria remain for the most part unexcavated; hence we have recovered but few monuments to tell us of their career. Damascus is still the largest city of Syria, having nearly two hundred thousand inhabitants, but the ruins of all the ancient Aramean buildings must now lie under those of the modern city; therefore it is unlikely that ancient Damascus will ever be unearthed.

We now understand that as the Assyrian armies faced the west they looked out upon an array of hostile nations which might have dismayed any people, however brave. In the foreground were the rulers of Mitanni, the Arameans, and the Phœnicians. In the far background rose the two mighty world powers, Egypt on the southwest and the Hittites (pp. 208-209) on the northwest. By the fifteenth century B.C. this Hittite Empire was a worthy rival of Egypt. The Assyrians watched the tremendous struggle between these two great powers for possession of the western end of the Fertile Crescent which

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ended in a drawn battle in the thirteenth century B.C. They saw both of these powerful western rivals sorely weakened by the struggle until, toward 1200 B.C., as it was further weakened by invasion from behind, the Hittite Empire fell. Half a century later the Empire of Egypt also collapsed. Mitanni had at first thrown in her lot with Egypt, but eventually the kingdom of Mitanni was crushed in the far-reaching international struggle. The leading contestants in the Near Eastern arena had been three: Egypt, Assyria, and the Hittites, struggling in a three-cornered rivalry. By 1150 B.C. the two great western powers had fallen, leaving Assyria to inherit the Empire of the East.

Confronting Assyria in the west, after the fall of Mitanni, of Egypt, and of the Hittites, there still remained the Phœnicians and the Arameans. As wealthy commercial rulers, the Aramean kings of Damascus were long able to make their city so strong as to block any effort at permanent advance by Assyria toward the Mediterranean. One of the best illustrations of the effect of their power is the fact that Damascus sheltered for a considerable length of time the two little Hebrew kingdoms from Assyrian attack. The Assyrian armies had marched westward and crossed the Euphrates by 1300 B.C. They had looked out upon the Mediterranean by 1100 B.C., but for more than three and a half centuries after this the kings of Assur were unable to conquer and hold this western region against the strong group of Aramean, Phœnician, and Hebrew kingdoms. These western kingdoms thus held the Assyrian armies at bay until the eighth century B.C.

As Assyrian power after 1000 B.C. thus seemed to pause at the threshold of her coming empire, let us look back for a moment over the long two thousand years of development and see what progress Assur had made. The first metal tools of the Assyrians were made of copper just as were those of other early peoples. During the third millennium B.C. bronze began to be used extensively, and this alloy was employed in the manufacture of tools and weapons until about 1000 B.C. Thus the Assyrian armies which marched westward before the beginning of the first millennium bore weapons of bronze,

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but after this time iron weapons were obtainable. Iron was already known to man in prehistoric times. Indeed, a piece of it was found buried in the masonry of the Great Pyramid at

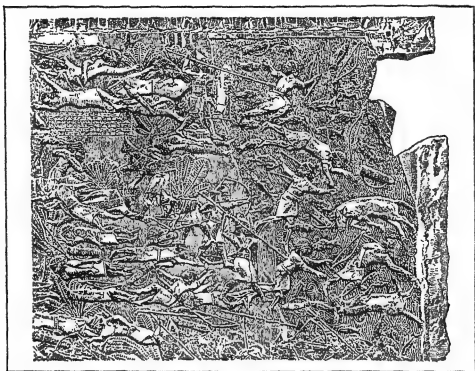


FIG. 66. ASSYRIAN SOLDIERS PURSUING THE FLEEING ENEMY ACROSS A STREAM

The stream occupies the right half of the scene. As drawn by the Assyrian artist, it may be recognized by the fish and the curling waves; also by the bows and quivers full of arrows floating downstream, along with the bodies of two dead horses, one on his back with feet up. Two dead men, with arrows sticking in their bodies, are drifting in midstream. Three of the living leap from the bank as their pursuers stab them with spears or shoot them with drawn bow. The Assyrian spearmen carry tall shields, but the archer needs both hands for his bow and carries no shield. The dead are strewn along the shore, occupying the left half of the scene. At the top the vultures are plucking out their eyes; in the middle an Assyrian is cutting off a head; beside him another plants his foot on a dead man's head and steals his weapons. The vegetation along the river is shown among the bodies, with abandoned weapons scattered between

Gizeh, where the masons who built the pyramid had left it. But iron remained a rarity until the Hittites discovered it in northeastern Asia Minor. From the thirteenth century onward the Hittite kings distributed the metal throughout the Near

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East. It was, therefore, in the first centuries of the Age of Iron that the Assyrians were preparing for western conquests, and their success was due, to a large extent, to the use of this metal in warfare.

Besides metal the west, especially the Hittites, brought into Assyrian life other things important to civilization. Under influences from the Hittite art of north Syria the sculptors of Assur learned to tell the story of the king's valiant exploits in elaborate stone pictures cut in flat relief on great slabs of alabaster. These were set up in long rows along the palace walls. As in sculpture, so also in architecture, the possession of stone enabled the Assyrians to do what had been impossible in almost stoneless Babylonia. The Assyrian builders could erect heavy foundations of stone under their buildings, as the Hittites and Syrians had long been doing. Above the foundations the Assyrian building itself, however, usually continued to be made of brick, as in Babylonia.

Many of the sacred stories and symbols of the gods which had grown up among the Babylonian communities were taken over by the men of Assur, who copied and studied and revered them; but the Assyrians clung to their old tribal god Assur, from whom came the name of their city and their tribe.



FIG. 67. SYMBOL OF THE GOD ASSUR SURMOUNTING AN ASSYRIAN REPRESENTATION OF THE TREE OF LIFE

Above is the winged sun-disk of Egypt, the borrowed symbol of the Assyrian Sun-god Assur, whom we see shooting his deadly arrows. Below is the beautiful symbol of the tree of life, which was developed by Assyrian artists into a decorative palm tree, as seen here, rising like a post in the middle, with its spreading crown of leaves at the top and festooned with tufts of palm leaves like those on the top of the tree. In this form it was later much used by the Greeks

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In the earlier times, when the Assyrians were still chiefly tillers of the soil, they seem to have thought of Assur as a god of the dying and ever-reviving vegetation, like Osiris in Egypt. However that may be, Assur's oldest symbol was the tree of life, which the Assyrians set up and decorated every spring like a May pole. Later, when Assyria became a nation of soldiers, they believed that Assur was a fierce god of war, whom they identified with the sun. He led the Assyrian kings on their victorious campaigns, and shot his deadly arrows far and wide among the foe. As his symbol, the Assyrians borrowed the winged sun-disk from the Hittites of Syria, who had received it from Egypt. The great goddess of the Assyrians was Ishtar, the goddess of love, whom we have already met in Babylonia. Religion among the warlike Assyrians, as in Babylonia, had little effect upon the conduct of the worshiper. One reason for this was the fact that the Assyrians had much the same notions of the hereafter as the Babylonians, with no belief in a judgment to come. Their burials, as often in Babylonia, were placed under the floor or court of the dead man's house.

Excavations at Assur uncovered a series of brick vaults under the pavements of the royal palace. In these vaults were found fragments of massive stone coffins. These are the oldest royal burials yet found in Assyria; for in these coffins once lay the bodies of the powerful kings of Assur, who lived and ruled and built there toward the end of the two-thousand-year development which led up to the Assyrian Empire.

In the ruins of the residence city of the Assyrian emperor Sargon II (722-705 B.C.) the Oriental Institute of the University of Chicago has recently discovered a cuneiform tablet containing a list of the kings of Assyria. There are listed one hundred and seven rulers, the first dating from the latter half of the third millennium B.C. Beginning with one of the kings in the early part of the second millennium, the scribe has set down the regnal years of the kings. When this list has been fully published, we shall have a fairly accurate chronology for about a millennium and a half of Assyrian history.

THE ASSYRIAN EMPIRE

The Assyrian Empire

While the great object of Assyrian expansion was the conquest of the west, in order to gain a foothold on the Mediterranean and to control the trade routes between east and west, hostile neighbors in the north, east, and south had often obliged the Assyrian kings to send their armies into these regions. During the fourteenth and thirteenth centuries B.C., while the Egyptian and Hittite empires were struggling for the supremacy in the west, the Assyrian rulers wisely stayed in the east and consolidated the position of Assyria there. When the Assyrians again turned their attention to western conquest, Assyrian prestige in the east was often threatened, and the kings were forced to lead punitive expeditions against Babylonia, Elam, the petty states in the Zagros mountains, or Urartu in the later Armenian country on the north. During the eleventh and tenth centuries B.C. Assyria suffered a decline due to the invasion by the Arameans of the eastern end of the Fertile Crescent. The ninth century, however, found the armies of Assur again on the march. As Assyria began to push her plans of westward expansion, the kingdoms of the west formed coalitions to block the advance of the invaders from the east. Damascus, the most important city of the west and often the leader of the resistance, was captured in 732 B.C. Shortly thereafter the countries of the west were finally subdued and made subject kingdoms of Assyria.

In the midst of the western campaigns, while besieging the unhappy Hebrew city at Samaria, the Assyrian king died (722 B.C.). The throne then passed to his son, who took, as king, the name of Sargon, the first great Semite of Babylonia, who had reigned about two thousand years earlier. The new Sargon, whom we call Sargon II, raised Assyria to the height of her grandeur and power as a military empire. His descendants were the great emperors of Assyria.¹ On the northeast of

¹ The leading kings of the dynasty of Sargon II are as follows:

| | |
|--|--------------|
| Sargon II | 722-705 B.C. |
| Sennacherib | 705-681 B.C. |
| Esarhaddon | 681-668 B.C. |
| Assurbanipal (called Sardanapalus by the Greeks) | 668-626 B.C. |

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Nineveh he built a new royal residence on a vaster scale and more magnificent than any Asia had ever seen before. He called it *Dur-Sharrukin* (Sargonburg). Its inclosure was a mile square, large enough to shelter a community of eighty thousand people, and the palace building itself covered twenty-five acres. Babylonia in her greatest days had never possessed a seat of power like this. In no uncertain terms it proclaimed Assyria mistress of Western Asia.

The grandeur of Sargon II was even surpassed by his son Sennacherib, one of the great statesmen of the ancient Near East. Far up in Asia Minor the name of Sennacherib was known and feared, as he plundered Tarsus and the easternmost Ionian Greek strongholds (p. 289) just after 700 B.C. Thence his campaigns swept southward capturing the Phœnician harbor towns along the Mediterranean to the very borders of Egypt. To be sure, much of Sennacherib's army was destroyed by a pest from the Delta marches, which the Hebrews regarded as the angel of the Lord (Yahveh); hence Sennacherib never crossed the Egyptian frontier. But against Babylon, his other ancient rival, he adopted the severest measures. Exasperated by one revolt after another, Sennacherib completely destroyed the venerable city of Hammurabi and even turned the waters of a canal over the desolate ruins.

Thus Babylon was annihilated; but the ancient power on the Nile remained a continual disturber of Assyrian control. A crushing burden of Assyrian tribute had been laid on all subject states, and hence Egypt was constantly able to stir revolt among the oppressed western peoples, who longed to be free from the payment of this tribute. Assyria perceived that Egypt's interference must be stopped. Sennacherib's son, therefore, appeared before the gates of the eastern Delta forts by 674 B.C. Repulsed at first, he returned to the attack; and, although he died before entering the Delta, Egypt at last fell a prey to the Assyrian armies and Sennacherib's grandson was for a time lord of the lower Nile.

By 700 B.C. the Assyrian Empire included all of the Fertile Crescent. It thus extended entirely around the great desert-bay; but it included furthermore much of the northern moun-

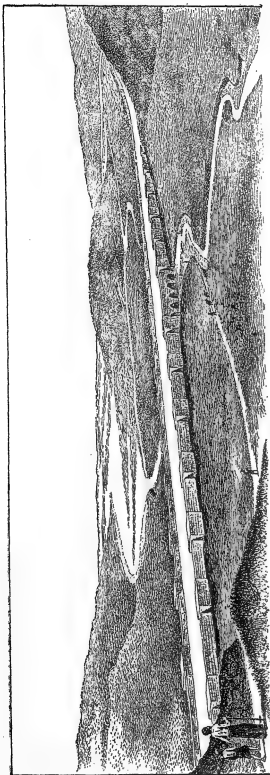


FIG. 68. THE OLDEST KNOWN AQUEDUCT: CONSTRUCTED BY SENNACHERIB

The remains of this remarkable feat of engineering skill were excavated in 1933 by the Oriental Institute of the University of Chicago. The aqueduct was a part of Sennacherib's great irrigation project for conveying water from the northern mountains thirty miles away to the fields around Nineveh. Finding that they must carry the water across a small river, the Assyrian engineers constructed a large stone-masonry channel nearly 1000 feet long and almost 80 feet wide, along which the water flowed between parapets 9 feet wide. The water was thus carried not only across the little river, as if on a bridge, but also across the river valley about 1000 feet wide. (After reconstruction by Seton Lloyd)

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tain country far behind. The conquest of Egypt gave it also the lower Nile Valley in the west, though this last was too distant and too detached to be kept long. Built up by irresistible and far-reaching military campaigns which went on for two generations after Sargon II, the Assyrian conquests finally formed the most extensive empire the world had yet seen.

Sennacherib was not satisfied merely to enlarge the old royal residences of his fathers at Assur or at Sargonburg. He devoted himself to the city of Nineveh, north of Assur, and it now became the far-famed capital of Assyria. To secure for the city a sufficient water supply Sennacherib connected it with the streams of the northern mountains by a canal with a magnificent aqueduct. Along the Tigris the vast palaces and imposing tower-temples of the Assyrian emperors arose, reign after reign. The lofty and massive walls of Nineveh which Sennacherib built stretched two miles and a half along the banks of the Tigris; and it was about eight miles around the inner walls of the city. Here in his gorgeous palace Sennacherib ruled the Western Asiatic world with an iron hand, and collected tribute from all the subject peoples.

The whole administration centered in the king's business office. He maintained a system of royal messengers. The earliest known road-building in Asia now began, and the most ancient surviving road there was built by Sargon II to connect Nineveh with his palace-town of Sargonburg. In each of the more important places on the main roads the king appointed an official to attend to the transmission of all royal business. In this manner clay-tablet letters, produce, and merchandise belonging to the royal house were sure of being forwarded. The organization formed the beginnings of a postal system, which continued for many centuries in the ancient Near East. The emperor received the letters and reports of over three-score governors of provinces and districts, besides those of many subject kings who were sometimes allowed to continue their rule under Assyrian control. We even have a number of clay-tablet letters dispatched by Sennacherib himself while he was crown prince, and addressed to his royal father, Sargon. To maintain the army was the chief work of the state. Indeed,

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the state was a vast military machine, more terrible than any mankind had ever yet seen. We shall understand this situation if we imagine the War Department to be the central office in Washington, with the government devoting itself chiefly to supporting it. We must here bring up again an important new fact which aided in bringing about this result. Through contact with the Hittite west (p. 205) iron had been introduced among the Assyrians. The Assyrian forces were therefore *the first large armies equipped with weapons of iron*. A single arsenal room of Sargon's palace was found to contain about two hundred tons of iron implements. To a certain extent the rise and power of the Assyrian Empire were among the results of the incoming of iron.

The bulk of the Assyrian army was composed of archers, supported by heavy-armed spearmen and shield bearers. Besides these, the famous horsemen and chariotry of Nineveh became the scourge of the East. For the first time too the Assyrians employed the battering-ram and formidable siege machinery. The sun-dried brick walls of the Asiatic cities could thus be battered down or pierced, and no fortified place could long repulse the assaults of the fierce Assyrian infantry.

Besides their iron weapons and their war machines the Assyrian soldiers displayed a certain inborn ferocity which held all Western Asia in abject terror before the thundering squadrons of the Ninevites.¹ Wherever the terrible Assyrian armies swept through the land, they left a trail of ruin and desolation behind. Around smoking heaps which had once been towns stretched lines of tall stakes, on which were stuck the bodies of rebellious rulers flayed alive; while all around rose mounds and piles of the slaughtered, heaped up to celebrate the great king's triumph and serve as a warning to all revolters. Through clouds of dust rising along all the main roads of the Empire the men of the subject kingdoms beheld great herds of cattle, horses, and asses, flocks of goats and sheep, and long lines of camels loaded with gold and silver, the wealth of the conquered, converging upon the palace at

¹ See Nahum iii, 2-3.

Nineveh. Before them marched the chief men of the plundered kingdoms, with the severed heads of their former princes tied about their necks.

While this plundered wealth was necessary for the support of the army, it served higher purposes also. As we have seen, the Assyrian palaces were now imposing buildings suggesting in architecture the far-reaching power of their builder. In the hands of the Assyrian architects the arch became an imposing monumental feature of architecture. The impressive triple arches of the Assyrian palace entrance, faced with glazed brick in gorgeous colors, were the ancestors of the Roman triumphal arches. On either side were vast human-headed bulls wrought in alabaster, and above the whole towered lofty castellated walls of baked brick, visible far across the royal city.

Within the palace, as a dado running along the lower portion of the walls, were hundreds of feet of relief pictures cut in alabaster. At Nineveh in a single mound the excavators cleared seventy-one palace halls and laid bare nearly two miles of such relief scenes, many of which they carried away to the British Museum. These sculptures display especially the great deeds of the emperor in campaign and hunting-field. The human figures are monotonously alike, and the faces have little expression. Indeed, the monumental size and official character of the work would preclude much attempt at portraiture. The Assyrian sculptor's wild beasts, however, are sometimes magnificent in the abandon of animal ferocity which they display. The tiger was in the blood of the Assyrian, and it came out in the work of his chisel. On the other hand, the pathetic expression of suffering exhibited by some of these wonderful animal forms was a triumph of art, which the Assyrian sculptor probably owed in part to a study of the superb lions and bulls on the exquisite old Babylonian seals of the age of Sargon I, two thousand years earlier. We must concede, however, that the animal sculpture of Assyria far surpassed that of any other ancient people.

Often above the sculptured frieze on the palace walls are found frescoes of pleasing designs. A thin coat of whitewash

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was spread over the surface mud plaster as a background for the paintings. The decorations consist mainly of zones and bands filled with figure designs—winged genii, gazelles, bulls, etc.—and ornamental patterns, such as rosettes, palmettes,

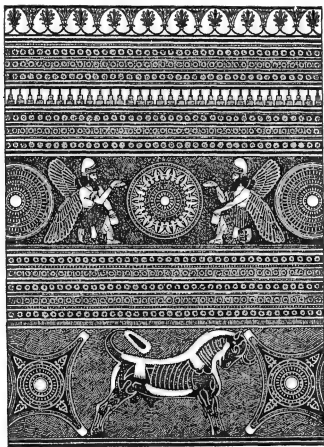


FIG. 6g. MURAL DECORATION FROM THE RESIDENCE OF AN OFFICIAL AT
THE COURT OF SARGON II

These ornamental designs were repeated down one entire side of a room over one hundred feet long. The figures of bulls and winged genii posed heraldically merge into the background to form circle after circle of color rhythm. (Found by the Oriental Institute at *Dur-Sharrukin*, modern Khorsabad; painting by C. B. Altman)

discs, divided circles, and crenelations. The expedition of the Oriental Institute at Khorsabad recently discovered in the residence of a court official a wall painting extending the length of a room. The colors used here were red, blue, and

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white, with the figures outlined in black. Analysis showed that the red was obtained from mercuric sulphide and the blue from lapis lazuli. The use of color in the Assyrian frescoes is exceedingly effective, and there is a rhythmic beauty in the arrangement of the motives.

As was natural, the Assyrians borrowed much from earlier cultures. The art of glazing colored brick had been developed in Egypt and Babylonia. Many ornamental patterns used by the Assyrian artists likewise came from Egypt; and their furniture of ebony and ivory, made by Phœnician workmen, often betrays Egyptian influence. Phœnician craftsmen at Nineveh wrought splendidly engraved bronze platters combining Egyptian and Assyrian motives. Sennacherib tells us he had in his palace "a portal made after the model of a Hittite palace," and his predecessors had long before built similar portals like those they had seen in the Hittite west. It is in this ability to use foreign resources that we must recognize one of the greatest traits of the Assyrian emperors.

By means of his new canal and aqueduct, Sennacherib was able to irrigate the fine gardens which he laid out along the river above and below Nineveh. Here he planted strange trees and plants from all quarters of his great empire. Among them were cotton trees, of which he says, "The trees that bore wool they clipped and they carded it for garments." These cotton trees came from India. We thus see appearing for the first time in the ancient world the cotton which now furnishes so large a part of our own national wealth.¹

Higher interests were also cultivated among the Assyrians, and literature flourished. Sargon II had already begun collecting a tablet library of old writings, and his successors continued this interest in literature. Assurbanipal, grandson of Sennacherib, and the last great Assyrian emperor, boasts that his father instructed him not only in riding and shooting with bow and arrow but also in writing on clay tablets and in all the wisdom of his time. A great collection of twenty-two thousand clay tablets was discovered in Assurbanipal's fallen li-

¹ This cotton tree was doubtless related to the lower-growing cotton plant of our Southern states.

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brary rooms at Nineveh, where they had been lying on the floor for twenty-five hundred years. They are now in the British Museum. In this library the religious, scientific, and literary works of past ages had been systematically collected by the emperor's orders. They formed the earliest library known in Asia. The Assyrians were far more advanced in these matters than the Babylonians, and Assyrian civilization was far from being a mere echo of Babylonian culture.

Like many another later ruler, however, the Assyrian emperors made a profound mistake in policy. For their wars of conquest led to the destruction of the industrial and wealth-producing population, first within their own territory and then throughout the subject kingdoms. In spite of interest in introducing a new textile like cotton, the Assyrian rulers did not or could not build up industries or commerce like those of Babylonia. The people were chiefly agricultural, and in the old days it had sufficed to call them from their farming for short periods to defend the frontiers. With the expansion of the Empire, however, such temporary bodies of troops were insufficient, and the peasants were *permanently taken from the fields* to fill the ranks of an ever-growing standing army. It is not improbable that the ruling class were buying up the small farms to form great estates. We learn of disused canals and idle fields as we read of Sargon's efforts to restore the old farming communities. Nevertheless, so vast an expansion of the Empire exceeded the power of the standing army to defend it.

As reports of new revolts came in, the harassed ruler at Nineveh forced the subjects of his foreign vassal kingdoms to enter the army. With an army made up to a dangerous extent of such foreigners, with no industries, with fields lying idle, with the commerce of the country in the hands of the Aramean traders, and with Aramean speech more common in the cities of the Empire, even in Nineveh, than that of the Assyrians themselves—under these conditions the Assyrian nation fast lost its inner strength.

In addition to such weakness within, there were the most threatening dangers from without. These came, as of old,

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from both sides of the Fertile Crescent. Drifting in from the desert, the Aramean hordes were constantly occupying the territory of the Empire. Sennacherib claims to have taken in one campaign over two hundred thousand captives out of Babylonia, mostly Arameans. At the same time another desert tribe called the Kaldi, whom we know as the Chaldeans, had been for centuries creeping slowly around the head of the Persian Gulf and settling along its shores at the foot of the eastern mountains. They were Semitic nomads, repeating what the Akkadians had done in Akkad, the Amorites in Babylon.

On the other hand, in the northern mountains the advancing hordes of Indo-European peoples had been in full view since the coming of the Mitannian horsemen. Mitanni had long ago disappeared and the Indo-Europeans were now led by the tribes of the Medes and Persians. These movements shook the Assyrian state to its foundations. The Egyptians had already shaken off Assyrian control; but, fearing the hordes of northern barbarians, the Pharaoh was induced to send an army to the support of the Assyrians. A tablet in the British Museum reveals to us the unexpected spectacle of an Egyptian army on the Euphrates fighting as allies of the Assyrians.

By 616 B.C. the Chaldeans had mastered Babylonia. Nabopolassar, the new Chaldean king at Babylon, who called himself "King of Akkad," marched against the Assyrians and, having twice defeated them, conquered as far north as their earliest capital at Assur, which he failed to capture. The next year (614 B.C.), however, the Medes from the northeastern mountains marched down the Tigris and captured Assur. Nabopolassar arrived too late to share in the assault, but he established an alliance with Cyaxares, the Median king, and together they attacked Nineveh.

Weakened by a generation of decline within, and struggling vainly against this combined assault from without, the mighty city of the Assyrian emperors fell (612 B.C.). In the voice of the Hebrew prophet Nahum (ii, 8, 13, and iii entire), we hear an echo of the exulting shout which resounded from the Caspian to the Nile as the nations discovered that the terrible scourge of the East had at last been laid low. Its fall was

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forever, and when two centuries later Xenophon and his ten thousand Greeks marched past the place, the Assyrian nation was but a vague tradition, and Nineveh, its great city, was a vast heap of rubbish as it is today. The remnants of the Assyrian army fled westward and with Egyptian support held together for a short time. With their defeat Assyrian power was ended. Even Assyrian speech passed away, and Aramaic became the tongue of the region which had once been Assyria, just as it was also to become the language of Babylonia. The second great chapter of history on the Two Rivers was ended, having lasted but a scant century and a half (about 750 to 612 B.C.).

The fall of Assyria, while dramatically sudden and tragically complete, nevertheless left the nations of Western Asia in a very different situation from that in which the first Assyrian emperors had found them. The rule of a single sovereign had been enforced upon the whole great group of nations around the eastern end of the Mediterranean, bringing these nations together in constant intercourse and thus for the first time creating a Near Eastern world having a common civilization. The methods of governing such an empire had been much improved. It was really in continuance of this organization that the great Persian Empire was built up, sixty years after the fall of Assyria. The Assyrian Empire, especially in its great military organization, marked a long step forward in that gradual growth of the idea of all-including world power, which culminated at last in the Roman Empire. In spite of its often ferocious harshness, the Assyrian rule had furthered civilization. The building of the magnificent palaces in and near Nineveh formed the first chapter in great architecture in Asia. At the same time Nineveh possessed the first libraries as yet known there. Finally, the Assyrian domination, as we shall see, created the international situation which enabled the Hebrews to gain the loftiest conceptions of their own God, as they matched him against the great war god of Assyria—conceptions which have profoundly influenced the entire later history of mankind.

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The Chaldean Empire

The Kaldi, or Chaldeans, the new masters of Babylonia, now founded an empire whose brief career formed the third great chapter of history on the Two Rivers. They were the last

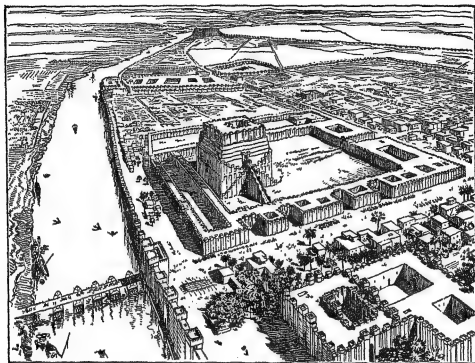


FIG. 70. THE RESTORATION OF THE CITY OF BABYLON IN THE AGE OF NEBUCHADNEZZAR

The tower in the foreground is the great temple of Marduk, surrounded by other buildings and temples of the sacred quarter in the southern section of the city. The group of buildings in the background, by the first bend in the river, is the palace of Nebuchadnezzar, with its Hanging Gardens. On the east (right) side of the temple quarter the Procession Street runs northward to connect with the palace. The Euphrates, flowing along the west (left) side of the city, is crossed by a bridge, dating from the sixth century B.C. A campaign of over eighteen years' excavation by the Germans under Koldewey has made this restoration possible. (Drawing after Koldewey)

Semitic lords of ancient Babylonia. The Chaldeans made their capital at Babylon, rebuilt after its destruction by Sennacherib. They called the land Akkad, although we now know it as Chaldea (from "Kaldi"). In 605 B.C., at Carchemish on the

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Euphrates, they defeated the combined armies of the west, including the remnant of the Assyrian host supported by that of Egypt. The empire of the Chaldeans then included the entire Fertile Crescent; but the Medes were left in possession of the northern mountains.

Returning to Babylon from his splendid victory at Carchemish, Nebuchadnezzar, the greatest of the Chaldean emperors, now (604 B.C.) began a reign of over forty years—a reign of such power and magnificence, especially as reflected to us in the Bible, that he has become one of the great figures of oriental history. Exasperated by the obstinate revolts encouraged by Egypt in the west, Nebuchadnezzar punished the western nations, especially the little Hebrew kingdom of Judah. He finally carried away many Hebrews as captives to Babylonia and destroyed Jerusalem, their capital (586 B.C.).

In spite of long and serious wars, the great king found time and wealth to devote to the enlargement and beautification of Babylon. Copying much from Assyria, Nebuchadnezzar was able to surpass his Assyrian predecessors in the splendor of the great buildings which he now erected. In the large temple quarter in the south of the city he rebuilt the temples of the long-revered Babylonian divinities. Leading from these to the palace, he laid out a festival avenue which passed through an imposing gateway called the Ishtar Gate, for it was dedicated to this goddess. Behind it lay the vast imperial palace and the offices of government, while high over all towered the temple-mountain which rose by the Marduk temple as a veritable Tower of Babel. Masses of rich tropical verdure, rising in terrace upon terrace and forming a lofty garden, crowned the roof of the imperial palace. This garden, overlooking the Ishtar Gate, enhanced the brightness of its colors. Here in the cool shade of palms and ferns, inviting to luxurious ease, the great king might enjoy an idle hour with the ladies of his court and look down upon the splendors of his city. These roof gardens of Nebuchadnezzar's palace were the mysterious Hanging Gardens of Babylon, whose fame spread far into the west until they were numbered by the Greeks among the Seven Wonders

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of the World. Babylon thus became a monumental city like those of Assyria and Egypt.

For the first time Babylonia saw a very large city. It was immensely extended by Nebuchadnezzar, and enormous fortified walls were built to protect it, including one (above the city) that extended entirely across the plain from the Tigris to the Euphrates. At the same time both banks of the Euphrates at Babylon were connected by the earliest bridge now known to us. The ruinous piers of this bridge, still stretching across the now dry earlier bed of the Euphrates, are the most ancient remains of bridge architecture surviving so far as we know. It is this Babylon of Nebuchadnezzar whose marvels over a century later so impressed Herodotus, as is shown in the description of the city which he has left us. This too is the Babylon which has become familiar to all Christian peoples as the great city of the Hebrew captivity. Of all the glories which made it world-renowned in its time little now remains. The German excavations here, which continued from 1899 to 1917, revealed for the most part only broken fragments of dingy sun-baked brick walls. With the exception of the Ishtar Gate little is left to suggest the brilliant life which once ebbed and flowed through the streets and public places. The Chaldeans seem to have absorbed the civilization of Babylonia in much the same way as other earlier Semitic invaders of this ancient plain. Commerce and business flourished, the arts and industries were highly developed, religion and literature were cultivated, and their records were put into wedge-writing on clay tablets as of old.

Science made important progress in one important branch—astronomy. The Babylonians had continued the ancient practice of trying to discover the future in the heavenly bodies. The five planets then known (Mercury, Venus, Mars, Jupiter, and Saturn) were especially regarded as the powers controlling the fortunes of men, and as such the five leading Babylonian divinities were identified with these five heavenly bodies. The names of these Babylonian divinities have descended to us as the names of the planets. But on their way to us through Europe, the ancient Babylonian divine names

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were translated into Roman forms. So the planet of Ishtar, the goddess of love, became Venus, while that of the great god Marduk became Jupiter, and so on. The practice of astrology has survived to our own day; we still unconsciously recall it in such phrases as "his lucky star" or an "ill-starred undertaking."

Chaldean astrology has also left an indelible mark on our calendar in the names which we apply to the days of the week. The five planets just mentioned, together with the sun and the moon, make up a group of seven celestial bodies, each of which was an important divinity. As Chaldean temple worship spread into Syria it became customary finally to pronounce the ritual and sing the praise of each god on a certain particular day. Thus the worship of each one of these seven divinities came around every seventh day. The name of the god worshiped on that day was finally transferred to the day itself. In this way the day which was devoted to the Sun-god became Sun-day, the day sacred to the Moon became Mon-day, and so on through the week, until the last day, sacred to Saturn, was called Satur-day. As our language came to us along a northern route, and there are consequently Norse elements in it, the names of several of our week-days have reached us in a northern form, like Wednesday (Woden's-day) or Thursday (Thor's-day). Nevertheless they all go back to the old Babylonian gods who still live on among us in our names of the days of the week.

Much more important than these surviving remains of Babylonian astrology were its services in gradually improving the observations of the skies till they became something more than mere fortune-telling. As far back as the twenty-third century B.C., in the days of the kings of Sumer and Akkad, the astrologers observed an eclipse of the moon which has been used by modern astronomers. But at that remote date such observations were only occasional, and they were also very inaccurate and unsystematic. Gradually it became customary to make more frequent observations, until in 747 B.C., in the reign of the Babylonian king Nabonassar, the series of observations became continuous and a record of them was carefully kept

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on file. Unfortunately, the complete file has not been preserved. So far as is now known, the oldest tablet from this list was made in 568 B.C. It is the oldest-surviving, carefully made astronomical observation. We now know that these records of the Chaldean astronomers continued for over three hundred and sixty years. They formed the first long series of astronomical observations and the first great body of astronomical knowledge. Indeed, modern astronomers have never yet made such a long-continued and uninterrupted series of observations.¹ It is especially remarkable that such scientific work continued to be carried on, even after the Chaldean people had lost their independence and were ruled by Persian sovereigns.

More remarkable than this great body of observations, however, was the use to which the ablest Chaldean astronomers put these records. Not long before 500 B.C., when the files of these continuous observations had been collecting for about two hundred and fifty years a Chaldean astronomer named *Nabu-rimannu*, used them to compile tables of the motions of the sun and moon, in which he recorded his calculations of the time required by these two heavenly bodies to make their revolutions, daily, monthly, yearly, and so forth, and exactly dating the eclipses of the sun and the moon, and other important astronomical events. He calculated the length of the year as three hundred and sixty-five days, six hours, fifteen minutes, and forty-one seconds. This splendid time-table of the vast celestial clock, put together by *Nabu-rimannu*, was the earliest great constructive piece of astronomical work. There was a grandeur in it which the mind of man had never achieved before.

The calculations of *Nabu-rimannu* were surprisingly near correctness. For example, in certain annual motions of sun and moon, his figures are less than ten seconds wrong for the whole year. Nevertheless, a little over a century later another

The only long-continued modern series of observations that can be compared with those of the Chaldeans are the meridian observations at Greenwich, England, which began in 1750, one hundred and eighty-seven years ago.

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Chaldean astronomer named *Kidinnu* made a similar group of tables of greatly increased accuracy. His calculation of the length of time required for annual sun-moon motions was only one second too long, and one of his measurements of celestial motions even exceeds in accuracy the figures which have long been in practical use by modern astronomers. This was because he had before him the records of three hundred and sixty years of lunar observations, and no modern astronomer has any such records at his disposal. Kidinnu even proved that there was a difference between the length of the year as measured from equinox to equinox and as measured between two successive arrivals of the earth at its nearest point to the sun.¹

The century-long astronomical observations of the Chaldeans, together with the calculations of Nabu-rimannu and Kidinnu, passed over to the Greeks. They studied the calculations of these two great Chaldean astronomers, whom they called Naburianos and Kidenas; and when the Greek engineer Meton was trying to introduce a scientific calendar at Athens, he took the length of his year from the tables of Nabu-rimannu. Of these two scientists a modern astronomer has said that they "are entitled to a place among the greatest of astronomers." These two remarkable Chaldeans, who first revealed to men a *system* of the celestial world, and thus became the founders of astronomical science, should be reverently remembered long after the kings and conquerors of the ancient world have been forgotten.

While Chaldea thus surpassed in science anything accomplished by Assyria, we see in the new architecture of Chaldean Babylon the influence of Assyrian architecture. The Chaldeans themselves, however, fancied that they were restoring the civilization of the old Babylonia of Hammurabi. The scribes loved to employ an ancient style of writing and out-of-date forms of speech; the kings tunneled deep under the temple foundations and searched for years that they might find the

¹ This is practically the discovery of the slow change in the obliquity of the earth's axis, a change often called the precession of the equinoxes.

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old foundation records buried (like our corner-stone documents) by kings of ancient days.

This dependence upon the past meant decline. After the death of Nebuchadnezzar (561 B.C.), whose reign was the high-water mark of Chaldean civilization, the old civilized lands of the ancient Near East seemed to have lost most of their former power to push forward and make fresh discoveries and new conquests in civilization, such as they had been making during three great ages on the Nile and three similar ages on the Two Rivers. Indeed, the leadership of the Semitic peoples in the early world was drawing near its close, and they were about to give way before the advance of new peoples of the Indo-European race, one group of which—the rulers of Mitanni—we have already seen appearing on the Fertile Crescent. But before we take up the movements of these new peoples, let us glance briefly at the little Hebrew kingdom which was destined to influence the history of man more profoundly than any of the great empires of the early world.

CHAPTER VII

WESTERN ASIA: THE HEBREWS

Palestine and the Predecessors of the Hebrews There

THE Hebrew kingdom developed on the west end of the Fertile Crescent, in a land now called Palestine.¹ It is the region lying along the southeast corner of the Mediterranean—a narrow strip between desert and sea; for while the sea limits it on the west, the wastes of the desert-bay sweep northward, forming the eastern boundary of Palestine. It was about one hundred and fifty miles long, and less than ten thousand square miles are included within these limits; that is, Palestine was somewhat larger than the state of Vermont.

Much of this area is unproductive, for the desert intrudes upon southern Palestine and rolls northward in gaunt and arid limestone hills, even surrounding Jerusalem. The valleys of northern Palestine, however, are rich and productive. The entire land is without summer rains and is dependent upon the winter rainy season for moisture. There is no opportunity for irrigation, and the harvest is therefore scantier than in lands enjoying summer rains. Only the northern end of the Palestinian coast has good harbors, but these were early seized by the Phœnicians (pp. 271-274). The harbors south of Haifa were exposed roadsteads. Palestine thus remained largely cut off from the sea. In natural resources it was too poor ever to develop prosperity or political power like its great civilized neighbors on the Nile and Euphrates or in Syria and Phœnicia.

Here at the western end of the Fertile Crescent, as at the eastern end, the Semitic nomads from the desert-bay mingled with the dwellers in the northern mountains of the Highland Zone. The northerners, chiefly Early Anatolians (later Hittites) from Asia Minor, left their mark on the Semites of Palestine. The prominent aquiline nose, still considered to be the mark of the Semite, especially of the Jew, was really a feature belonging to the non-Semitic Anatolians (p. 205), who intermarried with the people of Palestine and gave them this Anatolian type of face (see Fig. 78). Strange faces from many

¹ On the origin of the name see p. 260.

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a foreign clime crowded the market-places of Palestine, amid a babel of various languages. Here the rich jewelry, bronze dishes, and ivory furniture of the Nile craftsmen mingled with the pottery of the Ægean Islands and of the Highland civilization, and with the gay woollens of Babylonia. The donkeys, which lifted their complaining voices above the hubbub of the market, had grazed along the shores of both Nile and Euphrates, and their masters had trafficked beneath the Babylonian tower-temples as well as under the shadow of the Theban obelisks. We recall how traffic with Babylonia had taught these western Semites to write the cuneiform hand. Stretching its narrow length, thus straitened between sea and desert, Palestine was a prolongation of the bridge between Asia and Africa—a middle ground where the civilizations of Egypt and Babylonia, of Phœnicia, the Ægean, and the Highland Zone, all represented by their wares, met and commingled as they did nowhere else in the ancient Near East.

Just as the merchandise of the surrounding nations met in peaceful competition in the markets of Palestine, so also the armies of these nations met there in battle. The situation of Palestine, between its powerful neighbors on the Nile and on the Euphrates, made it the battleground where these great nations fought for many centuries. The only transverse barrier that blocks the inter-continental road is the ridge of Carmel in central Palestine. Commanding the main pass through this ridge was the fortress of Megiddo called in Greek Armageddon. Thus the plain of Armageddon became the proverbial battlefield of the nations for ages. Over and over again unhappy Palestine went through the experience of little Belgium in the conflict between Germany and France in 1914. Egypt held Palestine for many centuries. Later Assyria conquered it. Chaldea also enslaved it, and we shall yet find it in the power of Persia (p. 221). When, therefore, the Hebrews originally took possession of the land, there was little prospect that they would ever long enjoy freedom from foreign oppression.

THE SETTLEMENT OF THE HEBREWS

The Settlement of the Hebrews in Palestine and the United Hebrew Kingdom

The Hebrews were all originally men of the Arabian Desert, wandering with their flocks and herds and slowly drifting over into their final home in Palestine. For two centuries (about



FIG. 71. ANCIENT EGYPTIAN PAINTING OF A BRICKYARD WITH ASIATIC CAPTIVES ENGAGED IN BRICKMAKING (FIFTEENTH CENTURY B.C.)

The Hebrew slaves working in the Egyptian brickyards (see Exod. i, 14, and v, 6-19) must have looked like this when Moses led them forth into Asia. At the left below, the soft clay is being mixed in two piles; one laborer helps load a basket of clay on the shoulder of another, who carries it to the brick-molder, at the right above. Here a laborer empties the clay from his basket, while the molder before him fills with clay an oblong box, which is the mold. He has already finished three bricks. At the left above, a molder spreads out the soft bricks with spaces between for the circulation of air to make them dry quickly in the sun. The overseer, staff in hand, sits in the upper right-hand corner, and below him we see a workman carrying away the dried bricks, hanging from a yoke on his shoulders. Thus were made the bricks used for thousands of years for the buildings forming so large a part of the cities of the ancient world, from the Near East to Athens and Rome

1400 to 1200 B.C.) their movement from the desert into Palestine continued. Another group of their tribes had been slaves in Egypt, where they had suffered much hardship under a cruel Pharaoh. They were successfully led out of Egypt by their heroic leader Moses, a great national hero whose achievements his people never forgot. On entering Palestine the Hebrews found the people we call Canaanites already dwelling there in flourishing towns protected by massive walls. The Hebrews were able to capture only the weaker Canaanite

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towns. As the rough Hebrew shepherds looked across the highlands of north Palestine they beheld their kindred scattered over far-stretching hilltops, with the frowning walls of many a Canaanite stronghold rising between them. Even Jerusalem in the Judean highlands for centuries defied the assaults of the Hebrew invaders.

Let us remember that these unconquered Palestinian towns at this time possessed a civilization fifteen hundred years old, with comfortable houses, government, industries, trade, writing, and religion—a civilization which the rude Hebrew



FIG. 72. CARAVAN OF CANAANITES TRADING IN EGYPT

As they appeared on the estate of a feudal baron about 1900 B.C. The Egyptian noble had this picture of them painted in his tomb, where it still is. Observe the shoes, sandals and gay woolen clothing, the costume of the Palestinian towns, worn by these Canaanites; observe also the metal weapons which they carry. The manufacture of these things created industries which had begun to flourish among the towns in Syria and Palestine by this time

shepherds were soon adopting; for they could not avoid intercourse with the unsubdued Canaanite towns, as trade and business threw them together. This mingling with the Canaanites produced the most profound changes in the life of the Hebrews. Most of them left their tents and began to build houses like those of the Canaanites; they put off the rough sheepskin they had worn in the desert, and they put on fine Canaanite raiment of gayly colored woven wool. After a time, in appearance, occupation, and manner of life the Hebrews were not to be distinguished from the Canaanites among whom they lived. In short, they had adopted Canaanite civilization, just as newly arrived immigrants among us soon adopt our clothing and our ways. Indeed, as the Hebrews intermarried with the Canaanites, they received enough Anatolian

THE SETTLEMENT OF THE HEBREWS

blood to acquire the Anatolian type of face, and they evidently absorbed also a large proportion of the Canaanite population.

These changes did not proceed everywhere at the same rate. The Hebrews in the less fertile South were more attached to the old desert life, so that many would not give up the tent and the old freedom of the desert. The wandering life of the nomad shepherd on the Judean hills could still be seen from the walls of Jerusalem. Here, then, were two differing modes of life among the Hebrews: in the fertile North of Palestine we find the settled life of the town and its outlying fields; in the South, on the other hand, the wandering life of the nomad still went on. For centuries this difference formed an important cause of discord among the Hebrews.

Fortunately for the Hebrews, Egypt was in a state of decline by 1100 B.C.; and Assyria had not yet conquered the west. But a Mediterranean people called Philistines had at this time migrated, perhaps from some one of the Ægean islands, to the sea plain at the southwest corner of Palestine. These Philistines formed a highly civilized and warlike nation, or group of city-kingdoms. Hard pressed by the Philistines, the Hebrew local leaders, or judges, as they were called, found it no easy task to unite their people into a nation. About a generation before the year 1000 B.C., however, a popular leader named Saul succeeded in gaining for himself the office of king. The new king was a southerner who still practiced the old nomad customs and preferred to dwell in a tent. In the fierce struggle to thrust back the Philistines, Saul was disastrously defeated, and, seeing the rout of his army, he fell upon his own sword and so died.

In a few years the ability of David (about 1000-960 B.C.), one of Saul's daring men-at-arms whom he had unjustly outlawed, won the support of the South. Seeing the importance of possessing a strong castle, the sagacious David selected the ancient fortress on the steep hill of Jerusalem, hitherto held by the Canaanites. The oldest occurrence of the name of the place has recently been found in Egyptian writings over a thousand years older than David's time. He took possession of

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the venerable city and made it his residence. Here he ruled for a time as king of the South, till his valor as a soldier and his victories on all sides won him also the support of the more prosperous North. The Philistines were now beaten off, and David ruled over an extensive Hebrew kingdom. He enjoyed a long and prosperous reign, and his people never forgot his heroic deeds as a warrior nor his skill as a poet and singer.



FIG. 73. HEBREWS PAYING TRIBUTE TO THE KING OF ASSYRIA

The Assyrian king, Shalmaneser III, stands at the left, followed by two attendants. Before him hovers the winged sun-disk. His appearance in the middle of the ninth century B.C., campaigning in the west against Damascus, so frightened the Hebrews of the Northern kingdom that their king (Jehu) sent gifts to the Assyrian king by an envoy, whom we see here bowing down at the king's feet. Behind the Hebrew envoy are two Assyrian officers who are leading up a line of thirteen Hebrews (not included here) bearing gifts of silver, gold, etc. The scene is carved on a black stone shaft set up by the Assyrian king in his palace on the Tigris, where the modern excavators found it. It is now in the British Museum

David's son, Solomon, became, like Hammurabi, one of the leading merchants of the East. He trafficked in horses and launched a trading-fleet in partnership with Hiram, the Phoenician king of Tyre. His wealth enabled him to marry a daughter of the king of Egypt, and he delighted in oriental luxury and display. He removed the portable tent which the Hebrews had thus far used as a temple, and with the aid of his friend Hiram, who loaned him skilled Phœnician workmen, he built a rich temple of stone in Jerusalem. Such splendor demanded a great income, and to secure it he weighed

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down the Hebrews with heavy taxes. The resulting discontent of his subjects was so great that, under Solomon's son, the Northern tribes withdrew from the nation and set up a king of their own (about 930 B.C.). Thus the Hebrew nation was divided into two kingdoms before it was a century old.

The Two Hebrew Kingdoms

There was much hard feeling between the two Hebrew kingdoms, and sometimes fighting. Israel, as we call the Northern kingdom, was rich and prosperous; its market-places were filled with industry and commerce; its fertile fields produced plentiful crops. Israel displayed the wealth and success of town life. On the other hand, Judah, the Southern kingdom, was poor; its land was meager; besides Jerusalem it had no large towns; many of the people still wandered with their flocks.

These two methods of life came into conflict in many ways, but especially in religion. Every old Canaanite town had for centuries had its local town god, called its *baal*, or "lord." The Hebrew townsmen found it very natural to worship the gods of their neighbors. They were thus unfaithful to their old Hebrew God Yahveh (or Jehovah).¹ To some devout Hebrews, therefore, and especially to those in the South, the Canaanite gods seemed to be the protectors of the wealthy class in the towns, with their luxury and injustice to the poor, while Yahveh appeared as the guardian of the simpler shepherd life of the desert, and therefore the protector of the poor and needy.

There was growing reason for such beliefs. Less than a century after the separation of the two kingdoms, Ahab, a king of the North, had had Naboth, one of his subjects, killed in

¹ The Hebrews pronounced the name of their god "Yahveh." They wrote it YHVH, without any vowels. As time passed they regarded this *tetragrammaton* ("four-letter-group") as too sacred to pronounce, and they inserted the vowels *e*, *o*, *a* of the Hebrew word for "Lord" and then, disregarding the YHVH consonants, pronounced their regular word for "Lord." Eventually the ancient pronunciation "Yahveh" was forgotten, and the YHVH group was pronounced with the *e*, *o*, *a* of the Hebrew word for "Lord," producing the word "Yehovah" or Jehovah. The pronunciation "Jehovah" began less than six hundred years ago.

order to seize a vineyard belonging to Naboth, and thus to enlarge his palace gardens. Reports of such wrongs stirred the anger of Elijah, a Hebrew of old nomad habits, who lived in the desert east of the Jordan. Still wearing his desert sheepskin, he suddenly appeared before Ahab in the ill-gotten vineyard and denounced the king for his seizure of it. Thus this uncouth figure from the desert proclaimed war between Yahveh and the injustice of town life. Elijah's followers finally slew not only the entire Northern royal family, but also the priests of the Canaanite gods (or baals). Such violent methods, however, could not accomplish lasting good. They were the methods of Hebrews who thought of Yahveh only as a war god.

Besides such violent leaders as these, there were also among the Hebrews more peaceable men, who likewise chafed under the injustice of town life. These men turned fondly back to the grand old days of their shepherd wanderings out on the broad reaches of the desert, where no man "ground the faces of the poor." This point of view is picturesquely set forth in a simple narrative history of the Hebrew forefathers—a glorified picture of their shepherd life, as we find it in the immortal tales of the Hebrew patriarchs, of Abraham and Isaac, of Jacob and Joseph. These tales belong among the noblest literature which has survived to us from the past (see Gen. xxiv, xxvii, xxviii, xxxvii, xxxix-xlvii, 12). We should notice also that they are the earliest example of historical writing in prose of finished literary style which we have inherited from any people, and their nameless author, whom we may call the Unknown Historian, is the earliest historian whom we find anywhere in human history. Unfortunately the Hebrews themselves early lost all knowledge of the name and identity of this gifted person, and they finally associated the surviving fragments of his work with the name of their great leader Moses.

Another century passed, and about 750 B.C. another dingy figure in sheepskin appeared in the streets of Bethel, where the Northern kingdom had an important temple. It was Amos, a shepherd from the hills of Judah in the South. In the soli-

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tudes of his shepherd life Amos had learned to see in Yahveh far more than a war god of the desert. To him Yahveh seemed to be a God of fatherly kindness, not demanding bloody butchery like that practiced by Elijah's followers, but nevertheless a God who rebuked the selfish and oppressive wealthy class of the towns. The simple shepherd could not resist the inner impulse to journey to the Northern kingdom and proclaim to the luxurious townsmen there the evils of their manner of life.

We can imagine the surprise of the prosperous Northern Hebrews as they suddenly met this rude shepherd figure clad in sheepskin, standing at a street corner and addressing a crowd of townsmen. He was denouncing their showy clothes, fine houses, beautiful furniture, and, above all, their corrupt lives and hard-heartedness toward the poor among their fellow Hebrews, whose lands they seized for debt and whose labor they gained by enslaving them. These things had been unknown in the desert. By such addresses as these Amos, of course, endangered his life, but he thus became the first social reformer in Asia. We apply the term "prophet" to the great Hebrew leaders who pointed out the way toward unselfish living, brotherly kindness, and a higher type of religion. The same kind of effort to lead men to show justice and kindness toward all, especially toward the poor, had long been known in Egypt (p. 87), and it is possible that Amos had heard of such Egyptian teachings. Fearing that his teachings might be lost if they remained merely spoken words, Amos finally sat down and put his sermons into writing, and thus they have survived to us.

While all this had been going on, the Hebrews had been learning to write, as so many of their nomad predecessors on the Fertile Crescent had done before them. They were now abandoning the clay tablet, and they wrote on papyrus with the Egyptian pen and ink. They borrowed their alphabet from the Phœnician and Aramean merchants. There is no doubt that our earliest Hebrew historian's admiration for the *nomad* life—although the nomads were without writing—did not prevent him from making use of this new and great con-

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venience of *town* life, that is, writing. The rolls containing the beautiful tales of the patriarchs, or bearing the teachings



FIG. 74. ARAMAIC LETTER WRITTEN BY A HEBREW COMMUNITY IN EGYPT TO THE PERSIAN GOVERNOR OF PALESTINE IN THE FIFTH CENTURY B.C.

This remarkable letter was discovered in 1907, with many other similar papers, lying in the ruins of the town of Elephantine in Upper Egypt. Here lived a community of six or seven hundred Hebrews, some of whom had probably migrated to Egypt before Nebuchadnezzar destroyed Jerusalem. They had built a temple to Yahveh (Jehovah) on the banks of the Nile. This letter tells how the jealous Egyptian priests formed a mob, burned the Hebrew temple, and plundered it of its gold and silver vessels. Thereupon the whole Hebrew community sat down in mourning, and for three years they tried in vain to secure permission to rebuild. Then, in 407 B.C., their leaders wrote this letter to Bagoas, the Persian governor of Palestine, begging him to use his influence with the Persian governor of Egypt to induce him to permit them to rebuild their ruined temple. They refer by name to persons in Palestine who are also mentioned in the Old Testament. The letter is written with pen and ink on papyrus, in the Aramaic language, which was now rapidly displacing Hebrew

of such men as Amos, were the first books which the Hebrews produced—their first literature. Such rolls of papyrus were exactly like those which had been in use in Egypt for over

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two thousand years. The discovery of the household papers of a Hebrew community in Egypt has shown us just how such a page of Hebrew or Aramaic writing looked (Fig. 74). But literature remained the only art the Hebrews possessed. They had no painting, sculpture, or architecture, and if they needed these things they borrowed from their great neighbors—Egypt, Phoenicia, Damascus, or Assyria.

The Destruction of the Hebrew Kingdoms by Assyria and Chaldea

While the Hebrews had been deeply stirred by their own conflicts *at home*, such men as Amos had also perceived and proclaimed the dangers coming from *abroad*, from beyond the borders of Palestine, especially Assyria. Amos indeed announced the coming destruction of the Northern kingdom by Assyria, because of the evil lives of the people. As Amos had foreseen, Assyria first swept away Damascus. The kingdom of Israel, thus left exposed, was the next victim, and Samaria, its capital, was captured by the Assyrians in 722 B.C. Many of the unhappy Northern Hebrews were carried away as captives, and the Northern nation, called Israel, was destroyed after having existed for a little over two centuries.

The national hopes of the Hebrews were now centered in the helpless little kingdom of Judah, which struggled on for over a century and a quarter more, in the midst of a great world conflict, in which Assyria was the unchallenged champion. Thus far thoughtful Hebrews had been accustomed to think of their God as dwelling and ruling in Palestine only. Did he have power also over the vast world arena where all the great nations were fighting? But if so, was not Assur, the great god of victorious Assyria, stronger than Yahveh, the God of the Hebrews? And many a despairing Hebrew, as he looked out over the hills of Palestine, wasted by the armies of Assyria, felt in his heart that Assur, the god of the Assyrians, must indeed be stronger than Yahveh, God of the Hebrews.

It was in the midst of somber doubts like these, in the years before 700 B.C., that the princely prophet Isaiah, in one great oration after another, addressed the multitudes which filled

the streets of Jerusalem. The hosts of Sennacherib were at the

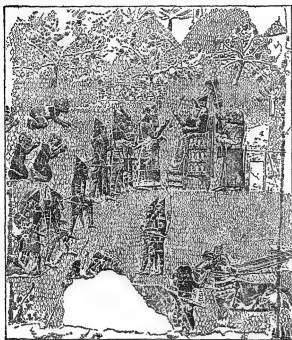


FIG. 75. SENNACHERIB, KING OF ASSYRIA,
RECEIVING CAPTIVE HEBREWS

The artist, endeavoring to sketch the stony hills of southern Palestine, has made the surface of the ground look like scales. We see the Assyrian king seated on a throne, while advancing up the hill is a group of Assyrian soldiers headed by the grand vizier, who stands before the king, announcing the coming of the Hebrew captives. At the left, behind the soldiers, appear three of the captives kneeling on the ground and lifting up their hands to appeal for mercy. The inscription over the vizier's head reads, "Sennacherib, king of the world, king of Assyria, seated himself upon a throne, while the captives of Lachish passed before him." Lachish was a small town of southern Palestine. Sennacherib captured many such Hebrew towns and carried off over two hundred thousand captives, but even his own records make no claim that he captured Jerusalem. The scene is engraved on a large slab of alabaster, which with many others adorned the palace of Sennacherib at Nineveh as evidence of his power and glory

gates, and the terrified throngs in the city were expecting at any moment to hear the thunder of the great Assyrian war engines battering down the crumbling walls of their city, as they had crushed the walls of Damascus and Samaria. Then the bold words of the dauntless Isaiah lifted them from despair like the triumphant call of a trumpet. He told them that Yahveh ruled a kingdom far larger than Palestine—that He controlled the great world arena, where *He*, and not Assur, was the triumphant champion. If the Assyrians had wasted and plundered Palestine, it was because they were but the lash in the hands of Yahveh, who was using them as a scourge to punish Judah for its wrongdoing. Isaiah made this all clear to the people by vivid oriental illustrations, calling Assyria the

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"rod" of Yahveh's anger, scourging the Hebrews (Isa. x, 5-15).

Thus while the people were momentarily expecting the destruction of Jerusalem, Isaiah undauntedly proclaimed a great and glorious future for the Hebrews and speedy disaster for the Assyrians. When at length a pestilence from the marshes of the eastern Nile Delta swept away the army of Sennacherib and saved Jerusalem, it seemed to the Hebrews the destroying angel of Yahveh who had smitten the Assyrian host (see II. Kings xix, 32-37). Some of the Hebrews then began to see that they must think of Yahveh as ruling a larger world than Palestine.

About a century after the deliverance from Sennacherib they beheld and rejoiced over the destruction of Nineveh (612 B.C.), and they fondly hoped that the fall of Assyria meant final deliverance from foreign oppression. But they had only exchanged one foreign lord for another, and Chaldea followed Assyria in control of Palestine. Then their unwillingness to submit brought upon the Hebrews of Judah the same fate which their kindred of Israel had suffered. In 586 B.C. Nebuchadnezzar, the Chaldean king, destroyed Jerusalem and carried away the people to exile in Babylonia. The Hebrew nation both North and South was thus wiped out, after having existed about four and a half centuries since the crowning of Saul.

The Hebrews in Exile and Their Deliverance by the Persians

Some of the fugitives fled to Egypt. Among them was the melancholy prophet Jeremiah, who had foreseen the coming destruction of Jerusalem with its temple of Yahveh. He strove to teach his people that each must regard his own heart as a temple of Yahveh, which would endure long after His temple in Jerusalem had crashed into ruin. Excavation has restored to us the actual papers of a colony of Hebrews in Egypt at Elephantine. These papers show that the exiled Hebrews in Egypt had not yet reached Jeremiah's ideal of a temple of Yahveh in every human heart; for they had built a temple of

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their own, in which they carried on the worship of Yahveh.

Similarly, the Hebrew exiles in Babylonia were not yet convinced of the truth of the teaching they had heard from their great leaders the prophets. There were at first only grief and unanswered questionings, of which the echo still reaches us:

By the rivers of Babylon
There we sat down, yea, we wept,
When we remembered Zion (Jerusalem).
Upon the willows in the midst thereof
We hanged up our harps.

How shall we sing Yahveh's song
In a strange land? (Psalm cxxxvii, 1-4)

Had they not left Yahveh behind in Palestine? And then arose an unknown voice¹ among the Hebrew exiles, and out of centuries of affliction gave them the answer. In a series of triumphant speeches this greatest of the Hebrews declared Yahveh to be the creator and sole God of the universe. He explained to his fellow exiles that suffering and affliction were the best possible training and discipline to prepare a people for service. He announced therefore that by afflicting them Yahveh was only preparing His suffering people for service to the world and that He would yet restore them and enable them to fulfil a great mission to all men. He greeted the sudden rise of Cyrus the Persian with joy. All kings, he taught, were but instruments in the hands of Yahveh, who through the Persians would overthrow the Chaldeans and return the Hebrews to their land.

Thus had the Hebrew vision of Yahveh slowly grown from the days of their nomad life, when they had seen him only as a fierce tribal war god, having no power beyond the corner of the desert where they lived, until now when they had come to see that He was a kindly father and a righteous ruler of all

¹ This unknown voice was that of a great poet-preacher, a prophet of the exile, whose name has been lost. But his addresses to his fellow exiles are preserved in sixteen chapters which ancient editing of the Hebrew writings has somehow embedded in the Old Testament book now bearing the name of Isaiah (Chapters xl to lv inclusive). We may call him the Unknown Prophet.

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the earth. This was monotheism, a belief which made Yahveh the sole God. They had reached it only through a long development, which brought them suffering and disaster—a discipline lasting many centuries. Just as the individual today, especially a young person, learns from his mistakes, and develops character as he suffers for his own errors, so the suffering Hebrews had outgrown many imperfect ideas. They thus illustrated the words of the greatest of Hebrew teachers: "First



FIG. 76. BARREL-SHAPED CLAY RECORD OF THE CAPTURE OF BABYLON BY CYRUS (538 B.C.)

It tells how "without battle and without fighting Marduk (God of Babylon) made him (Cyrus) enter into his city of Babylon; he spared Babylon tribulation, and Nabonidus the (Chaldean) king, who feared him not, he delivered into his hand." Nabonidus, the Chaldean king of Babylon, was not in favor with the priests, and they assisted in delivering the city to Cyrus

the blade, then the ear, then the full grain in the ear."¹ By this rich and wonderful experience of the Hebrews in religious progress the whole world was yet to profit.

When the victorious Persian king Cyrus entered Babylon (p. 220) the Hebrew exiles there greeted him as their deliverer. His triumph gave the Hebrews a Persian ruler. With great humanity the Persian kings allowed the exiles to return to their native land. Some had prospered in Babylonia and did not care to return, but at different times enough of them went back to Jerusalem to rebuild the city on a very modest scale and to restore the temple.

The authority given by the Persian government to the returned Hebrew leaders enabled them to establish and publish

¹ The words of Jesus; see Mark iv, 28.

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the religious laws which have ever since been revered by the Jews. The religion thus organized by the returned Hebrew leaders we now call Judaism, the religion of the Jews. Under it the old Hebrew kingship was not revived. In its place a High Priest at Jerusalem became the ruler of the Jews. The Jewish state was thus a *religious* organization, a church with a priest at its head.

The leaders of this church devoted themselves to the study of the ancient writings of their race still surviving in their hands. A number of the old writings, some of them mentioned in the Old Testament, had been lost. They arranged and copied the orations and addresses of the prophets, the tales of the Unknown Historian, the marvelous addresses of the Unknown Prophet, and all the old Hebrew writings which they still possessed. In doing so they sometimes combined under one name writings which had been the work of different authors; for no conception of the rights of an author had yet arisen among men, nor did any one conceive that readers were being misled. As time went on and the service of the restored temple developed, they arranged a remarkable book of a hundred and fifty religious songs—the hymn book of the second temple, known to us as the Book of Psalms. For a long time, indeed for centuries, these various Hebrew books, such as the Law, the Prophets, the Psalms, and others, circulated in separate rolls, and it did not occur to anyone to put them together to form one book.

It was not until Christian times that the Jewish leaders put all these old writings of their fathers together to form one book. Printed in Hebrew, as they were originally written, they form the Bible of the Jews at the present day. These Hebrew writings have also become a sacred book of the Christian nations. In the form of an English translation, it is called the Old Testament, and is today the most precious legacy which we have inherited from the ancient Near East before the coming of Christ. It tells the story of how a rude shepherd folk issued from the wilds of the Arabian Desert, to live in Palestine and to go through experiences there which made them the religious teachers of the civilized world. And we

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should further remember that, crowning all their history, there came forth from them in due time the Founder of the Christian religion (p. 610). One of the most important things that we owe to the Persians, therefore, was their restoration of the Hebrews to Palestine. The Persians thus saved and aided in transmitting to us the great legacy from Hebrew life which we have in the Old Testament and in the life of the Founder of Christianity.

CHAPTER VIII

WESTERN ASIA: THE COMING OF THE INDO-EUROPEANS

The Indo-European Peoples and Their Dispersion

WE HAVE seen that the Arabian Desert has been a great reservoir of unsettled population, which was continually leaving the grasslands on the margin of the desert and shifting over into the towns to begin a settled life. Corresponding to these grasslands of the *south*, there are similar grasslands in the *north*. These northern grasslands stretch from the lower Danube eastward along the north side of the Black Sea through southern Russia and far into Asia north and east of the Caspian. In ancient times they always had a wandering shepherd population; and time after time for thousands of years the northern nomads have poured forth over Europe and Western Asia, just as the desert Semites of the south have done over the Fertile Crescent.

Among these nomads of the north there were in very early times an important branch of the white race, which we call *Indo-European*. These early Indo-Europeans were the ancestors of the leading peoples of Europe today. As our forefathers came from Europe, the Indo-European nomads were also our own ancestors. These people of the northern grasslands began to migrate in very ancient times, moving out along diverging routes. They at last extended in an imposing line from the frontiers of India on the east, westward across all Europe to the Atlantic, as they do today, and hence their name, Indo-Europeans. This great northern line was confronted on the south by a similar line of Semitic peoples, extending from Babylonia on the east, through Phœnicia and the Hebrew kingdoms, westward to Carthage and similar Semitic settlements of Phœnicia in the Western Mediterranean.

The history of the ancient world, as we are now to follow it, was largely made up of the struggle between this *southern Semitic* line, which issued from the southern grasslands, and the *northern Indo-European* line, which came forth from the northern grasslands to confront the older civilizations represented in the southern line. Thus as we look at the diagram

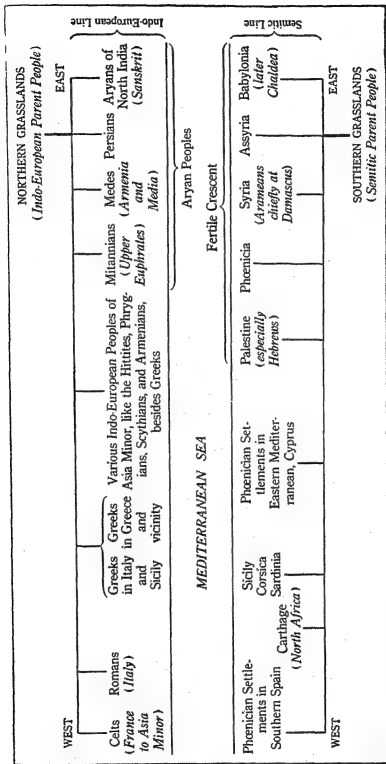


FIG. 77. DIAGRAM SUGGESTING THE TWO LINES OF SEMITIC AND INDO-EUROPEAN DISPERSION

WESTERN ASIA: THE INDO-EUROPEANS

(Fig. 77) we see the two great races facing each other across the Mediterranean like two vast armies stretching from Western Asia westward to the Atlantic. The later wars between Rome and Carthage represent some of the operations on the Semitic left wing, while the triumph of Persia over Chaldea is a similar outcome on the Semitic right wing.

The result of the long conflict was the complete triumph of our ancestors (the Indo-European line), who conquered along the center and both wings and finally, as represented by the Greeks and Romans, gained unchallenged supremacy throughout the Mediterranean world. This triumph was accompanied by a long struggle for the mastery between the members of the northern line themselves. Among them the victory moved from the east end to the west end of the northern line, as first the Persians, then the Greeks, and finally the Romans gained control of the Mediterranean and oriental world.

Let us now turn back to a time before the Indo-European peoples had left their original home on the grasslands. Modern study has not yet determined with certainty the region where the parent people of the Indo-European nomads had its home. The indications now are that this original home was on the great grassy steppe in the region east and northeast of the Caspian Sea. Here, then, probably lived the parent people of all the later Indo-Europeans. At the time when they were still one people, they were speaking one and the same tongue.

Divided into numerous tribes, they wandered at will, seeking pasturage for their flocks, for they possessed domestic animals, including cattle and sheep. But chief among their domesticated beasts was the horse. The Indo-Europeans employed the horse not only for riding, but also for drawing their wheeled carts. The ox already bore the yoke and drew the plow, for some of the tribes had adopted a settled mode of life, and cultivated grain, especially barley. Being without writing, they possessed but little government and organization. Before they dispersed, they had probably just begun to use copper.

As their tribes wandered farther and farther apart they lost

THE INDO-EUROPEANS AND THEIR DISPERSION

contact with each other. Local peculiarities in speech and customs become more and more marked, resulting in wide differences such as may be suggested to us by the increasing differences between the once wholly identical languages of England and America. While at first the different Indo-European groups could doubtless understand one another when they met, these differences in speech gradually became so great that the widely scattered tribes, even if they happened to meet, could no longer make themselves understood, and finally they lost all knowledge of their original kinship. This kinship has only been rediscovered in very recent times. The final outcome, in so far as speech was concerned, was the languages of modern civilized Europe; so that beginning with England in the west and going eastward, we can trace more than one common word from people to people entirely across Europe into northern India. Note the following words:

| WEST | | | EAST | | |
|----------------|---------------|---------------|----------------|----------------------------|---------------------------|
| English | German | Latin | Greek | Old Persian and Avestan | East Indian (Sanskrit) |
| <i>brother</i> | <i>bruder</i> | <i>frāter</i> | <i>phrātēr</i> | <i>brātar</i> | <i>bhrātār</i> |
| <i>mother</i> | <i>mutter</i> | <i>māter</i> | <i>mētēr</i> | <i>mātar</i> | <i>mātār</i> |
| <i>father</i> | <i>vater</i> | <i>pater</i> | <i>patēr</i> | <i>pītar</i> | <i>pītār</i> |

In the west the earliest known group of these wanderers from the northern grasslands had entered Asia Minor by 2500 B.C. These were the invaders who founded the Hittite Empire (pp. 207-213). Another Indo-European group pushed southward and westward and subdued the population in the western bend of the Euphrates, where they became, as we have already seen, the ruling class of a new nation called Mitanni. Farther west the most advanced tribes of the Indo-Europeans had crossed the Danube and were far down in the Balkan Peninsula by 2000 B.C. Some of them had doubtless already entered Italy by this time. These western tribes were, of course, a part of the mixed ancestry of the Greeks and

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Romans; at least they brought the earliest dialects of Greek and Roman (Latin) speech into Greece and Italy. We shall later join them and follow them in their conquest of the Mediterranean. Before doing so, however, we have to watch the advance of the Indo-Europeans *first* in Asia Minor (Anatolia), and *second* at the eastern end of the Fertile Crescent.

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As we look at the Highland Zone in Western Asia, we are aware that, hidden within and behind its screen of mountains, important movements of mankind must have been going on for a long time in a region which we have not yet discussed. The Highland Zone here includes a broad band of country extending from the Ægean Sea on the west, eastward along the north side of the Fertile Crescent, and then farther eastward, between the Caspian Sea and the Persian Gulf to the Iranian plateau on the east. A glance at the maps will show that this region comprised, from west to east, Anatolia (or Hittite Asia Minor), Armenia, Media, and Persia. Throughout all this extensive region the Neolithic peoples advanced to a Bronze Age civilization, various elements of which were similar and related. Beautiful painted pottery recently found in Persia resembles closely pottery found in Anatolia at the other end of the Highland Zone civilization. We cannot yet give this far-reaching early civilization a name; but, naming it geographically, it is convenient to call it the Highland civilization. It is thought to have originated on the Iranian plateau, and great quantities of its pottery and bronzes have recently been found in western Persia and Media. Connected with it was the earliest civilization in Elam, which seems to have been very old. Regarding the race of the Highland peoples¹ who developed this civilization we can say very little. Without doubt they were not all of one race, and they seem not to have been Indo-Europeans in the beginning. A very important part in the development of the Highland

¹ Sometimes called Japhethites (Speiser, E. A., *Mesopotamian Origins*, pp. 15 ff. and 171 ff.), and divided into various groups, including among others the Elamites.

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civilization was played by the peoples who occupied Anatolia, or Hittite Asia Minor, especially because of the metals which they found in their mountains.

Asia Minor, or Anatolia,¹ the greater part of which was for so long under the domination of the Hittites, is a vast peninsula from six hundred and fifty to seven hundred miles long and from three to four hundred miles wide, being about as large as the state of Texas. The interior is a lofty tableland, little better than a desert in its central region. Around most of this tableland rise mountain ridges, fringing both the tableland and the sea. On both sides of the mountain fringe are fertile valleys and plains, producing plentiful crops. The seaward slopes of the mountains, especially along the Black Sea, are clad with flourishing forests. The northern shores of Asia Minor, east of the Halys River, rise into ridges containing rich deposits of metal ore, especially iron. The Hittites thus became the earliest distributors of iron, when it began to displace bronze in the Mediterranean world and the Near East.

In the earliest period before the Indo-European invasions, it is convenient to call the inhabitants of the western end of the Highland Zone in Asia *Early Anatolians*. They were without doubt inhabiting this region when their economic development had reached only the Neolithic stage. These Early Anatolians tended to overflow at both ends of Asia Minor. At its *western* end some of them may have migrated to Crete and to the mainland of Greece even before they began to use metal. We recall that at the *eastern* end of Asia Minor the Early Anatolians migrated into Palestine in such numbers that their unmistakable features, with prominent aquiline nose, become the prevailing type in the whole region of Palestine.

We know very little about the Early Anatolians, and it will

¹ Anatolia is a Greek word equivalent to the Latin "orient"; but usage has given it a much more limited meaning, for it is used to designate only Asia Minor as far east as the Upper Euphrates. It has now been discovered that the earliest peoples of this region were not identical with the historic Hittites. Before the incoming of the Hittites we may therefore call the peoples of Asia Minor "Early Anatolians," a term which implies nothing regarding their race or nationality.

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require decades of persistent excavation before we shall be able to piece together any considerable account of their life and history. A Neolithic house found at a depth of eighty-five feet under the Hittite city mound of Alishar gives us some hints of their life just before the dawn of the Age of Metal. Probably as early as 2500 B.C. the Indo-Europeans of the north and east began to push in, perhaps through the Caucasus Mountains. This was the first appearance of the Indo-Europeans in the arena of history. The latest discoveries have shown that it is these Indo-European invaders of Anatolia whom we should call Hittites. This invasion was the first of those vast movements of Indo-European migration in Western



FIG. 78. AN ANCIENT HITTITE AND HIS MODERN ARMENIAN DESCENDANT

At the left is the head of an ancient Hittite as carved by an Egyptian sculptor on the wall of a temple at Thebes, Egypt, over three thousand years ago. It strikingly resembles the profile of the Armenians still living in the Hittite country, as shown in the modern portrait on the right

Asia which resulted finally in the conquest of the Fertile Crescent and the whole Near East by the Indo-European Medes and Persians. The Indo-Europeans introduced the domesticated horse into Asia Minor, as presumably they did along the Fertile Crescent also. The Early Anatolians were not exterminated, but, just as in Mitanni, these horse-breeding invaders seem to have formed the ruling class. In language the result was a mixture of speech. The new, mixed language of course contained Early Anatolian words, appearing side by side with Indo-European words and grammatical forms. For over a thousand years this mixed speech was an important

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language of Western Asia. We shall call it Hittite as distinguished from the language of the pre-Indo-European age.

When they entered Anatolia the Hittites were barbarians. The rise of the civilization which we may call Hittite was at first due to influences from the Fertile Crescent. In times past, as we remember, Babylonian caravans had traded in Asia Minor, and, later, merchants from Assyria had settled there. These business communities from the Fertile Crescent made the Hittites acquainted with commercial transactions. In doing business the Hittites themselves gradually learned to read the clay-tablet bills and invoices, written in cuneiform, which the Assyrian merchants brought with them. Quantities of these tablets have been found in the Hittite cities, and excavations have even uncovered fragments of clay-tablet dictionaries with three columns: the first Sumerian, the second Assyro-Babylonian, and the third Hittite.¹ Thus the Hittites learned to write Hittite words in cuneiform. The clay tablet also became common in the Hittite world, and it was probably through the Hittites that the use of clay tablets passed over into Crete. After the introduction of writing the Hittites made noticeable progress, and by 2000 B.C. they were a highly civilized people. Fully able to compete with the greatest nations of the ancient Near East, they twice rose as the rival of Egypt and Assyria. These two great periods we shall call the First Hittite Empire (about 1900 to 1650 B.C.) and the Second Hittite Empire (about 1400 to 1200 B.C.).

The earliest Hittite king of whom we have any knowledge is Anitta, who arose in the city of Kussar, in eastern Asia Minor, perhaps about 2000 B.C. The exact location of Kussar is not known. It is quite clear that the Hittites did not then form a single nation, but lived in a number of kingdoms, which, like the later Greek kingdoms, were often at war with one another. The leadership was finally gained by the king-

¹ The Hittite tablets contained so many Babylonian word signs that during the World War the Czechoslovakian scholar, Bedřich Hrozný, succeeded in deciphering Hittite *cuneiform*. Since the war our knowledge of Hittite has increased greatly, and the German scholar, Emil Forrer, has shown that the tablets found at the Hittite capital contain examples of seven languages besides Hittite.

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dom of Hatti,¹ which lay inside the great bend of the Halys River in central Asia Minor. Its capital was called Hattusas. The kings of Hatti were able to conquer neighboring kingdoms and build up a small empire. Early in the eighteenth century B.C. the able King Mursil, the first of that name, ruled at Hattusas. In the days when the power of Hammurabi's successors at Babylon was tottering, it was Mursil I who marched down the Euphrates, captured Babylon, and overthrew the last of Hammurabi's line. The successors of Mursil I were less able than he, and shortly after his time the First Hittite Empire fell, without having come into collision with Egypt.

The Second Hittite Empire, which arose about 1400 B.C., remained for two centuries the greatest power in Western Asia. Its founder, who bore the name Suppiluliyuma, was the ablest soldier Western Asia had seen since the campaigns of Thutmose III, which had begun less than a century before those of the great Hittite. When Suppiluliyuma appeared in Syria and on the banks of the Euphrates after 1400 B.C., he was breaking up the northern conquests of his Egyptian predecessor. There was no Thutmose III to turn back the powerful Hittite soldier. Demoralized by the religious revolution of Ikhnaton, the Egyptians could only helplessly watch the advance of the Hittites as they conquered all Syria and made it Hittite territory. Thereupon Suppiluliyuma crossed the Euphrates and crushed the power of Mitanni. The Hittite conqueror was now lord over a goodly part of Western Asia.

Among the clay tablets which have been dug up in the Hittite capital of Hattusas there is a remarkable cuneiform letter, written at this time to the great Hittite emperor by a queen of Egypt who was either Ikhnaton's widow or his third daughter, who had married Tutenkhamon. This letter is striking evidence of the Hittite conqueror's greatness and power; for the Egyptian queen tells him that she has no son to occupy her dead husband's throne, and she begs the Hittite ruler to send one of his sons to become her husband and thus

¹ The name *Hatti* is of course the origin of our modern name, "Hittite." The closeness of the resemblance will be evident when the modern ending *-ite* is removed, leaving *Hitt*.

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to be the king of Egypt. The marriage, if it had taken place, would have made the Hittite royal family supreme over both the Egyptian and Hittite empires. The two together would have formed the greatest empire the world had ever seen. But the Hittite emperor was suspicious of the Egyptian queen's extraordinary proposal, and before sending his son he made an investigation. When, after this delay, he did finally send one of his sons, it was too late. Arriving in Egypt after the powerful enemies of Ikhnaton's family had pushed aside the widowed queen, the young Hittite prince was seized and slain. Thus Suppilulyuma lost the opportunity of gaining control of Egypt without striking a blow. But he had other sons, and these he crowned as the leading kings of Syria and thus made the northern end of the Egyptian Empire his own. On the south his empire extended down to Palestine, which Egypt continued to hold; on the east, beyond the Euphrates, his territory included much of Mitanni, and his eastern boundary for a time lay far over toward Assyria. On the north and west the Second Hittite Empire included the larger part of Asia Minor, and the powerful commercial city of Troy must have felt the pressure of Hittite power, if it was not indeed a vassal of the Hittite conqueror.

The two empires, Egyptian and Hittite, were now rivals for the leadership of the world. It was a rivalry which was fought out for over a quarter of a century between the grandsons of Suppilulyuma and the Pharaohs Seti I and Ramses II. As the war went on, especially after 1300 B.C., the rise of Assyria gave the Hittite emperors increasing uneasiness. They made treaties with their vassal kings in Syria which pledged the latter to act as enemies of Assyria. Among the clay tablets found at Hattusas is an office copy of a very interesting letter urging the young king of Babylon also to attack Assyria from behind.

Then, as dissensions arose among the Hittites themselves, Suppilulyuma's grandson, Hattusil, arranged a treaty of peace with Ramses II. Thus the struggle between these two powerful rivals ended. Intimate relations between the two royal families were established. Even the queens of Egypt and of

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Hatti exchanged friendly greetings and letters of congratulation on the new peace pact. These clay-tablet letters, written some time in the 1270's B.C., were found by the modern excavators lying among the royal files and records dug up at Hattusas. Later on the Hittite emperor sent his daughter to Egypt to become the wife of Ramses II. On the walls of the Egyptian temples, almost as far south as the Second Cataract in Nubia, the Pharaoh's sculptors carved the scene depicting the arrival of his Hittite bride.

The civilization of the Second Hittite Empire attained a high level and had a far-reaching influence. It is important to notice some of its leading achievements. The Hittite state was built up out of a large group of weaker kingdoms conquered by the original kingdom of Hatti. Every year the subject states were obliged to contribute infantry and chariotry to the emperor's army. The emperor's power consisted of this composite army combined with soldiers drawn from his own kingdom of Hatti. The government operated under a system of wise laws, which even the king himself was bound to obey. The advance of Hittite civilization is disclosed to us in the fact that after the peace with Egypt the Hittite king, perhaps Hattusil, issued a revised code of these laws which was much more humane than formerly. Nearly two hundred paragraphs, forming a large part of this code, have survived on the clay tablets. In the code the king often refers to former, more severe punishments which he is making less severe. For stealing a head of cattle the penalty had formerly been a fine of thirty head, but in the new code this fine was reduced to fifteen. Even for murder, capital punishment was not inflicted. This Hittite code was far more humane than the laws of Assyria, and more so indeed than the codes of Babylonia or Egypt. The respect for law which the Hittite kings display is very remarkable. Indeed, Suppiluliyuma admits that his invasion of the Egyptian Empire in Syria was unlawful and regards an epidemic of plague among his people as a punishment for his offense.

The enlightened attitude of the Hittite kings was doubtless responsible in some degree for the remarkable developmen:

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among the Hittites along lines other than statecraft. The earliest impressive stone architecture in Asia was the work of the Hittite architects. The powerful walled city of Hattusas was the first really large city in Asia. It far surpassed the Babylon of that day in size, and the Nineveh of the Assyrian emperors was still some six or seven centuries in the future.

The most notable form introduced by the Hittite architects into building was the front of the king's palace, which consisted of a porch in the middle, with its roof supported on two columns, while on either side of the porch was a square tower. The building was called "a house of two towers." It was such a porch which was adopted by the great Assyrian emperors in their palaces, and it finally reached the Persians.

The Hittite architects understood the value of sculpture as an adornment of architecture. Set up on either side of the central doorway of the king's palace were two splendid sentinel lions carved in stone. This idea of protective animal images was drawn from the similar use of the Egyptian sphinxes, which were likewise taken over by the Hittites. Sculpture was further employed in the embellishment of the wall by a dado, consisting of large, flat slabs of stone carved with relief pictures. These were transmitted by the Hittites to Assyria. The Hittites adopted symbols of artistic and religious value from both Egypt and Babylonia. In the Hittite reliefs, for instance, we find the Egyptian winged sun-disk and the early Babylonian symbol of the eagle with outspread wings and lion's head or sometimes a double head. The sun-disk passed eastward to the Assyrians and Persians. The eagle was handed on across the Ægean westward to later Europe, from which it finally came to us in the United States as the American eagle.

The clay-tablet records of the Hittite emperors are the earliest historical narratives which display a literary prose style. The Hittite scribes were interested in literature, and this interest led them to make copies of the old Babylonian writings with evident pleasure. The story of the Babylonian hero Gilgamesh was known throughout the whole of Asia Minor. Besides religious compositions there were even special treatises, such as an essay on horse-breeding which the Hittites

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borrowed from Mitanni. Unlike the scribes of the other great civilizations the Hittite writers were interested in being known as authors, and attached their names to their writings. They were the earliest known self-conscious authors, and they thus show a very modern spirit.

As the Hittite emperors began to erect stone buildings they felt the need of a larger monumental style of writing which



FIG. 79. A HITTITE PRINCE HUNTING DEER

The prince, accompanied by his driver, stands in the moving chariot, shooting with bow and arrow at the fleeing stag. A hound runs beside the horses. Over the scene is an inscription in Hittite hieroglyphs. The whole is sculptured in stone and forms a good example of Hittite art

would make it possible to decorate a building with historical records as the Egyptians did. They therefore devised a system of writing made up of picture signs. Carved on rocky cliffs or masonry walls, records written in these new *hieroglyphic* signs still look down upon the traveler throughout a large part of Asia Minor from the Ægean to the Euphrates. Although this hieroglyphic writing of the Hittites has not yet been fully deciphered, the decipherers have made extraordinary progress.¹

¹ Scholars differ as to the period which produced the Hittite hieroglyphic writing. The majority incline to the belief that it did not rise until toward the end of the Second Hittite Empire, and some orientalists even think that this writing was produced by another people. There is, however, some evidence for an earlier date before the Second Empire.

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The Hittite records suggest that there may have been Babylonian and Egyptian elements in the Hittite religion. The Hittites worshiped two great groups of gods: those of the earth and those of the sky. Side by side with the Earth-Mother, to whom the Hittites were devoted, was their Sun-god. So prominent was the latter that the Hittite emperor even called himself "the Sun."

Hittite civilization reached its highest development in the great days of the Egyptian Empire. Cnossus in Crete (p. 243) was in its Grand Age, and Troy in western Asia Minor (p. 253) had built the splendid Sixth City. Lying thus between the great civilizations of southeastern Europe and of the Near East, Hittite civilization served as a link connecting the two, and the influences which it passed on to the early Ægean peoples were of permanent importance. From the Hittite world the Greeks received elements in art, architecture, and religion. Furthermore, of great significance is the fact that it was through the Hittites that iron became better known throughout the Near East. However, the Hittites are not to be considered as



FIG. 80. SILVER BOSS WITH HITTITE INSCRIPTION IN CUNEIFORM AND HIEROGLYPHIC WRITINGS

Around the edge of the plate is found a clause of Hittite cuneiform, reading "Tarkondemos, king of the country of Mera." On either side of the figure in the center are placed identical sets of hieroglyphic signs. According to Dr. Ignace J. Gelb, of the Oriental Institute, who is working on the decipherment of Hittite hieroglyphics, an excellent case may be made for translating these lines of hieroglyphic also "Tarkondemos, king of the country of Mera." This means that the boss furnishes the decipherers with a Hittite bilingual inscription, comparable—in a small way, of course—to the Rosetta Stone (Fig. 134) or the inscription of Darius at Behistun (Fig. 87). The reading of the hieroglyphic signs here can be made to apply to other texts. By such slow and laborious methods of ascertaining the value or meaning of a few signs at a time, the patient decipherers solve, one by one, the last riddles of Hittite hieroglyphic writing

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merely carriers of civilization. As we have seen, the Hittites made significant original contributions to the cultures of the ancient Near East. These influences were handed on by Assyria to the Persians, that other great Indo-European people of Western Asia, who now require our consideration.

The Aryan Peoples and the Iranian Prophet Zoroaster

It is an established fact that the easternmost tribes of the Indo-European line, having left the parent people, were pasturing their herds in the great steppe on the east of the Caspian by about 2000 B.C. Here they formed a people properly

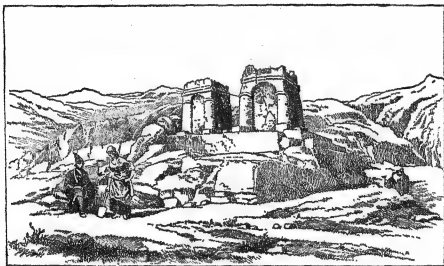


FIG. 81. ANCIENT PERSIAN FIRE ALTARS NEAR PERSEPOLIS

called the Aryans,¹ and here they made their home for some time. The Aryan people had no writing, and they have left

¹ The Indo-European parent people apparently had no common name for all their tribes as a great group. The term "Aryan" is often popularly applied to the parent people, but this custom is incorrect. "Aryan" (from which "Iran" and "Iranian" are later derivatives) designated a group of tribes, a fragment of the parent people, which detached itself and found a home for some centuries just east of the Caspian Sea. When we hear the term "Aryan" applied to the Indo-European peoples of Europe, or when it is said that we ourselves are descended from the Aryans, we must remember that this use of the word is historically incorrect, though very common. The Aryans, then, were *Eastern* descendants of the Indo-European parent people, as we are *Western* descendants of the parent people. The Aryans are our distant cousins but not our ancestors.

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no monuments. Nevertheless, the beliefs of their descendants show that the Aryan tribes already possessed a high form of religion, which summed up conduct as "good thoughts, good deeds." Fire occupied an important place in this faith, and they had a group of priests whom they called "fire-kindlers."

When the Aryans broke up, probably about 1800 B.C., they separated into two groups. The eastern tribes wandered south-eastward and eventually arrived in India. In their sacred books, which we call the *Vedas*, written in Sanskrit, there are echoes of the days of Aryan unity, and they furnish many a hint of the ancient Aryan home on the east of the Caspian.

The tribes of the other group kept the name "Aryan" in the form of "Iran," so that we call them Iranians.¹ They also left the Aryan home and pushed westward and southwestward into the mountains bordering the Fertile Crescent. The rulers of Mitanni were a tribe of this Iranian group. Farther east were two powerful groups of the Iranians called the Medes and Persians, who were to conquer the Fertile Crescent and establish the last great oriental empire in Western Asia.

As we have seen, from earliest times the peoples of the mountains bordering the eastern end of the Fertile Crescent had been a constant menace to the security and peace of the inhabitants of Babylonia and Assyria. Elam and Urartu had been especially formidable enemies of Assyria (p. 165). As a consequence, the Assyrian emperors had repeatedly despoiled them and finally broken their power. Perhaps in so doing Assyria made a great mistake, for these two countries might have had the strength to resist the advance of the Indo-Europeans, and so served as a buffer protecting the Assyrians and Chaldeans.

As the frontier peoples had been thus weakened by the Assyrians, the Medes met little resistance, and by 700 B.C. they had established a strong Iranian empire in the mountains east of the Tigris. It extended finally from the Persian Gulf, where it included the Persians, northwestward in the general

¹ They have given their name to the great Iranian plateau, which stretches from the Zagros Mountains eastward to the Indus River. This whole region was known in Greek and Roman days as *Ariana*, which (like *Iran*) is of course derived from *Aryan*.

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line of the mountains, to the Black Sea region. The front of the Indo-European eastern wing was thus roughly parallel with the Tigris at this point, but its advance was not to stop here. As their capital the Medes founded the city of Ecbatana.



FIG. 82. PAINTING PROBABLY REPRESENTING ZOROASTER

This painting comes from a temple of Mithras which was recently discovered at Dura on the Euphrates by Professor Clark Hopkins, director of the Yale University Expedition in coöperation with the French Académie des Inscriptions et Belles Lettres. (Courtesy of Gallery of Fine Arts, Yale University)

It lay directly opposite the pass that led through the Zagros Mountains to the Fertile Crescent and to the city of Babylon itself. A century later Nebuchadnezzar and his successors at Babylon looked, therefore, with anxious eyes at this dangerous Median power, recalling, no doubt, how in 612 B.C. these same people had so willingly united in the assault against Nineveh. The Chaldeans on the Euphrates represented the

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leadership of men of Semitic blood from the *southern* pastures. Their leadership was now to be followed by that of men of Indo-European blood from the *northern* pastures. As we see the Chaldeans giving way before the Medes and Persians, let us bear in mind that we are watching a great racial change, and remember that these new Iranian masters of the East were our kindred; for both we and they have descended from the same wandering shepherd ancestors, the Indo-European parent people, who once dwelt in the far-off pastures of inner Asia, probably five thousand years ago.

All of these Iranians possessed a beautiful religion inherited from old Aryan days before their migration. A generation after the fall of Nineveh, perhaps about 570 B.C.,¹ there was born a Median prophet named Zoroaster. He began to look out upon the life of men in an effort to find a new religion which would meet the needs of man's life. He watched the ceaseless struggle between good and evil which seemed to meet him wherever he turned, and which he found already expressed in the beliefs of his people about the old gods. To him there appeared to be a struggle between a group of good beings, on the one hand, and a group of evil powers, on the other. The Good became to him a divine person, whom he called Mazda, after one of the old gods, or Ahuramazda, which means "Lord of Wisdom," and whom he regarded as God. Ahuramazda was surrounded by a group of helpers much like angels, of whom one of the grèatest was the Light, called Mithras. Opposed to Ahuramazda and his helpers, it was finally believed, there was an evil group led by a great Spirit of Evil named Ahriman. It was he who later was inherited by Jews and Christians as Satan.

Thus the faith of Zoroaster grew up out of the struggle of life itself and became a great power in life. It was one of the noblest religions ever founded. It called upon every man to stand upon one side or the other—to fill his soul with the Good and the Light or to dwell in the Evil and the Darkness.

¹ There has been much difference of opinion about the date of Zoroaster. Several earlier dates formerly seemed possible, but the evidence now favors the sixth century B.C.

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Whatever course a man pursued, he must expect a judgment hereafter. This was the earliest appearance in Asia of belief in a last judgment. Zoroaster's new faith was an idealization of the old beliefs and old gods of his people. Therefore he retained the old Aryan veneration of fire as a visible symbol of the Good and the Light, and he preserved the ancient fire-kindling priests.

Unable to influence his own people, Zoroaster left the Medes and finally went south to the Persians, preaching his

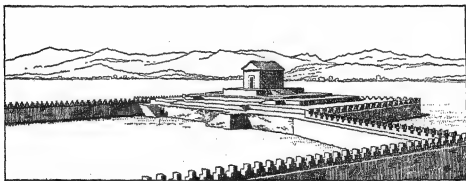


FIG. 83. RESTORATION OF THE EARLIEST KNOWN PERSIAN TEMPLE

This temple was recently discovered at Pasargadæ by Herzfeld, who concludes that it was erected by Cyrus himself, near whose palace and tomb it stands. (After Herzfeld)

new religion, and probably for many years he found but little response to his efforts. We can discern his hopes and fears alike in the little group of hymns he has left, probably the only words of the great prophet which have survived. It is characteristic of the horse-loving Iranians that Zoroaster is said finally to have converted one of their great kings by miraculously healing the king's crippled horse. The new faith had gained a firm footing before the prophet's death, however, and before 500 B.C. it was the leading religion of the Iranians and accepted by the Persian emperors. It is even possible that Darius erected the prophet's tomb. Besides the hymns mentioned above, fragments of his teaching have descended to us in writings put together in the early Christian era, many centuries after the prophet's death. All together

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these sacred writings form a book known as the *Avesta*. This we may call the Bible of the Persians.

The Rise of the Persian Empire

No people became more zealous followers of Zoroaster than the group of Iranian tribes known as the Persians. Through them a knowledge of him has descended to us. The overthrow of the Elamites by the Assyrians in the middle of the seventh century B.C. left Elam open to foreign occupation, and the Persians took possession of the country. At the fall of Nineveh, 612 B.C., they were already well settled in the region at the southeastern end of the Zagros Mountains, just north and east of the Persian Gulf. Its shores are here little better than desert, but the valleys of the mountainous hinterland are rich and fertile. In these valleys the Persians occupied a district some four hundred miles long. They were a rude mountain peasant folk, leading a settled agricultural life, with simple institutions, no art, no writing or literature, but with stirring memories of their past. As they tilled their fields and watched their flocks they told many a tale of their Aryan ancestors and of the ancient faith they held.

They acknowledged themselves vassals of their kinsmen the Medes, who ruled far to the north and northwest of them. One of the Persian tribes dwelling in the mountains of Elam, was organized as a little kingdom called Anshan. About sixty years after the fall of Nineveh Anshan was ruled over by a Persian named Cyrus, who succeeded in uniting the other tribes of his kindred Persians into a nation. Thereupon Cyrus rebelled against the rule of the Medes. He gathered his peasant soldiery, and within three years he defeated the Median king and made himself master of the Median territory. The extraordinary career of Cyrus was now a spectacle upon which all eyes in the West were fastened with wonder and alarm.

The overflowing energies of the new conqueror and his peasant soldiery proved irresistible. The Persian peasants seem to have been remarkable archers. The mass of the Persian army was made up of bowmen, whose storm of arrows at long range overwhelmed the enemy long before the hand-

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to-hand fighting began. Bodies of the skillful Persian horsemen, hovering on either wing, then rode in and completed the destruction of the foe. These arrangements were taken by the Persians from the Assyrians, the greatest soldiers the East had ever seen.

The great states Babylonia (Chaldea) and Egypt, Lydia under King Croesus in western Asia Minor (p. 318), and even Sparta in Greece (p. 284) formed a powerful combination against this sudden menace, which had risen like the flash of a meteor in the eastern sky. Without an instant's delay Cyrus struck at Croesus of Lydia, the chief author of the hostile combination. One Persian victory followed after another. By 546 B.C. Sardes, the Lydian capital, had fallen, and Croesus, the Lydian king, was a prisoner in the hands of Cyrus. Cyrus at once gained also the southern coasts of Asia Minor. Within five years the power of the little Persian kingdom in the mountains of Elam had swept across Asia Minor to the Mediterranean and it had become the leading state in the oriental world.

Turning eastward again, Cyrus had no trouble in defeating the Chaldean army led by the young crown prince Belshazzar, whose name in the Book of Daniel (see Dan. v) is a household word throughout the Christian world. In spite of the vast walls erected by Nebuchadnezzar to protect Babylon, the Persians entered the great city in 538 B.C., seemingly without resistance. Thus, only seventy-four years after the fall of Nineveh had opened the conflict between the former dwellers in the northern and the southern grasslands, the Semitic East completely collapsed before the advance of Indo-European power.

Cyrus established his capital and royal residence at Pasargadæ, where the palace of the heroic conqueror has recently been excavated. Very little of it has survived; but on one of the reliefs the lower portion of a royal figure is preserved, and on a fold of the garment, in cuneiform signs, we may still read the words, "Cyrus, the great king." Here, also, he built a temple for the faith of Zoroaster, who was probably still living. It is the oldest known Persian temple. Nine years

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after his capture of Babylon, Cyrus, the first great conqueror of Indo-European blood, fell in battle (529 B.C.) as he was fighting with the nomads in northeastern Iran. His body was reverently laid away in a massive tomb of impressive simplicity at Pasargadaë, and there it was found two hundred years later by Alexander the Great.

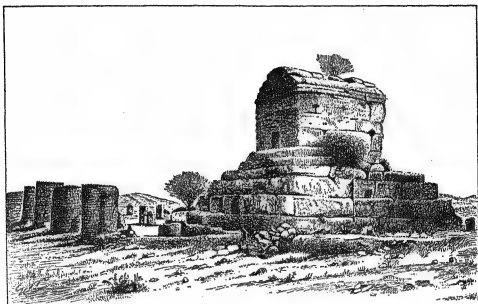


FIG. 84. THE TOMB OF CYRUS AT PASARGADÆ

Perhaps built by Cyrus himself alongside his temple and his palace. The body of Cyrus had lain in this tomb for nearly two hundred years when Alexander the Great found it plundered of its royal ornaments and lying on the floor. He ordered the body restored to its place, and had the tomb chamber closed up. It is now empty. (From an etching by George T. Plowman)

All Western Asia was now subject to the Persian king; and in 525 B.C., only four years after the death of Cyrus, his son Cambyses conquered Egypt. This conquest of the only remaining ancient oriental power rounded out the Persian Empire to include the whole civilized East from the Nile Delta around the entire eastern end of the Mediterranean to the Ægean, and from this western boundary eastward almost to India. The great task had consumed just twenty-five years since the overthrow of the Medes by Cyrus. It was an achievement for which the Assyrian Empire had prepared the way,

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and the Persians were now to learn much from the great civilizations which had preceded them.

The Civilization of the Persian Empire

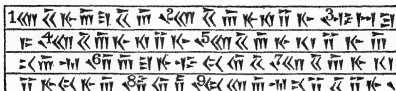
The Persians found Babylon a great and splendid city, with the vast fortifications of Nebuchadnezzar stretching from river to river and his sumptuous buildings visible far across the Babylonian plain. The city was the center of the commerce of Western Asia and the greatest market in the early oriental world. Along the Nile the Persian emperors now ruled the splendid cities whose colossal monuments have been described. These things and the civilized life which the Persians found along the Nile and the Euphrates soon influenced them greatly, as we shall see.

Aramaic, the speech of the Aramean merchants who filled the busy market places of Babylon, had by this time become the language of the whole Fertile Crescent. Business documents were now written in Aramaic with pen and ink on papyrus, and clay tablets bearing cuneiform writing were slowly disappearing. The Persian officials were therefore obliged to carry on their government business, such as the collection of taxes, in the Aramaic tongue throughout the western half of the Persian Empire. Even as far as the Nile and western Asia Minor, they sent out their government documents in Aramaic, this universal language of business.

The government of the Persian kings, like that of the Assyrian Empire, was thus "bilingual," by which we mean that it employed two languages—Aramaic and the old Persian tongue. Even in writing Persian, the Persians often employed Aramaic letters, as we write English with Roman letters. But they already possessed a cuneiform *alphabet*, having probably gained the idea of an alphabet from Aramaic writing. Recent discoveries at Ecbatana, the Median capital, indicate that the Medes devised this new alphabet of thirty-nine *cuneiform* signs, which was now employed for writing Persian on clay tablets. They also used it when they wished to make records on large monuments of stone. Thus the Iranians, who had been so long entirely without writing, began to make endur-



A



B

FIG. 85. THE TWO OLD PERSIAN INSCRIPTIONS WHICH WERE FIRST DE-CIPHERED AND READ

The Persian scribes separated the words in their inscriptions by inserting an oblique wedge between the words. The above Arabic numbers are here added in order to be able to refer to the different words. It will be seen that these numbers (except 1) always stand where the oblique wedge shows a new word begins. Grotefend noticed that the same word is repeated a number of times in each of these inscriptions. In *A* compare Nos. 2, 4, 5, and 6, and they will be recognized as the same word. In *B* it occurs also four times (Nos. 2, 4, 5, and 7). As these inscriptions were found above the figures of Persian kings, Grotefend therefore suspected that this frequent word must be the Persian word for "king." Moreover, as it occurs in both inscriptions as No. 2, the preceding word (No. 1) would probably be the *name* of the king, the two words being arranged thus: "Darius [the] king." Grotefend then found that the words for the titles of the kings of Persia were known in later Persian documents. Guided by the known titles, he attempted the following guess as to the arrangement and meaning of the words:

| | | | |
|-----------------|------------|-----------------|---------|
| 1 | 2 | 3 | 4 |
| unknown name of | [the] king | [the] great | king |
| a Persian king | | | |
| 5 | 6 | 7 | 8 |
| of kings, | of king | unknown name of | the son |
| | | a Persian king | |

etc. (6, 7, and 8 meaning "the son of King So-and-so"). He next experimented with the known names of the kings of Persia, and, judging from their length, he found that the probable name for No. 1 in *A* was "Darius," and for No. 1 in *B* was "Xerxes." The result may be seen in

ing written records. These monuments are the earliest Median and Persian documents which have descended to us.

The cuneiform records of the Persians are especially im-

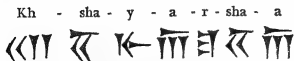


FIG. 86. THE NAME OF XERXES IN OLD PERSIAN CUNEIFORM

This is the first word in Fig. 85 (B), supposed by Grotefend to be "Xerxes." Now, just as our "Charles" is an imperfect form of the ancient name "Carolus," so the name we call "Xerxes" was pronounced by the old Persians *Khshayarsha*. The above seven signs, therefore, should be read Kh-sha-y-a-r-sha-a. Grotefend in this way learned the sounds for which these signs stood. Now some of these signs appear in the word Grotefend thought was "king" in Persian. Hence it was now possible for Grotefend to see if he could find out how to pronounce the ancient Persian word for "king." And the reader can do the same. Let him copy on a slip of paper the first three signs in the word supposedly meaning "king"; for example, use word 2 in Fig. 85. Now take these three signs and compare them with the signs in "Xerxes." The student will find that the three signs he has copied are the same as the first, second, and seventh signs in the word "Xerxes." Let us write down in a row the sounds of these three signs (first, second, and seventh), and we find we have *Kh-sha-a*. The ancient Persian word for "king" must have begun with the sounds *Kh-sha-a*. When we compare this with *shah*, the title of the present king of Persia, it is evident that Grotefend was on the right road to decipher Old Persian cuneiform

important in that they first enabled us to read the cuneiform inscriptions of Western Asia. After Aramaic had displaced the Babylonian and Assyrian languages, there finally came a time when no one wrote any more clay tablets or other records in the ancient wedge-form writing. The latest cuneiform tablet known belongs among the astronomical records of the Chaldeans and was written in the year 7 B.C.¹ Nearly two thousand years ago, therefore, the last man who could read a cuneiform tablet had passed away. The history of Babylonia and Assyria was consequently lost

under the city mounds along the Tigris and Euphrates.

Now the Persian cuneiform, consisting of only thirty-nine alphabetical signs, was not difficult. In the early nineteenth century A.D. Grotefend, a German schoolmaster, identified and

¹ The tablet is dated in the year 305 of the Seleucid era. This era began in 312 B.C. The date of this latest cuneiform document is therefore 7 B.C.

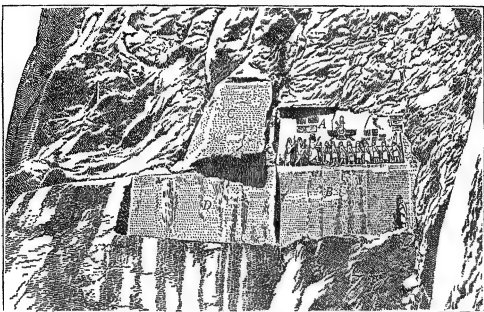


FIG. 87. TRIUMPHAL MONUMENT OF DARIUS THE GREAT, THE ROSETTA STONE OF ASIA, ON THE CLIFF OF BEHISTUN

This impressive monument is the most important historical document surviving in Asia. It is made up of four important parts: the relief sculptures (*A*) and the three inscriptions (*B*, *C*, *D*). *B* is a great inscription, in columns some 12 feet high, recording the triumph of Darius over all his enemies in the extensive revolts which followed his coronation. It is in the Persian language, written with the new cuneiform alphabet of thirty-nine letters which the Medes probably devised. The other two inscriptions (*C* and *D*) are translations of the Persian (*B*). *C* therefore contains the same record as the Persian (*B*), but it is in the Babylonian language and is written in Babylonian cuneiform with its several hundred wedge-signs. *D*, the third inscription, is also cuneiform, in the language of the region of Elam, and hence is called Elamite. Thus the Great King published his triumph in the three most important languages of this eastern region and placed the record overlooking a main road at Behistun, where the men of the caravans passing between Babylon and the Iranian Plateau would look up 300 feet and see the splendid monument, 25 feet high and 50 feet wide. To reach it requires a dangerous climb, and it was on this lofty cliff, at the risk of his life, that Sir Henry Rawlinson copied all three of these cuneiform inscriptions (1835-1847). By the use of these copies Rawlinson succeeded in deciphering the ancient Babylonian cuneiform, and this great monument of Darius therefore enabled modern historians to recover the lost language and history of Babylonia and Assyria. It did for Western Asia what the Rosetta Stone did for Egypt. (Drawn from photographs of the British Museum Expedition)

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read the names of Darius and Xerxes and some other Persian words. Various interested European scholars were later able to discover the sounds of nearly all the signs in the Persian cuneiform alphabet. By 1847 Sir Henry Rawlinson, a British army officer, had completed the decipherment of Persian cuneiform, and scholars were then able to read the old Persian inscriptions. But the number of these inscriptions then known was very small. Indeed, the chief value of the ability to read ancient Persian cuneiform records lay in the fact that this Persian writing might form a bridge leading over to an understanding of ancient *Babylonian* cuneiform.

Scholars had early discovered that the inscription C on the great Behistun monument of King Darius (Fig. 87) was written with the same cuneiform signs which were also observable on many of the older clay tablets and stone monuments found in Babylonia. It was understood, therefore, that if inscription C at Behistun could be deciphered, it would be possible then to read the ancient documents of Babylonia and Assyria. Within three years Rawlinson, working from the Behistun inscriptions, had deciphered Babylonian cuneiform also. At once the city mounds of Babylonia and Assyria began to speak and tell us, piece by piece, the three great chapters of history along the Two Rivers—something over twenty-five hundred years of the story of man in Western Asia, of which the world before had been entirely ignorant. The ability to read cuneiform records and thus gain this knowledge we owe to the documents left us by the Persian kings.

The organization of such a vast empire, stretching from the Indus River to the Ægean Sea (almost as long as the United States from east to west) and from the Indian Ocean to the deserts of the Caspian, was a colossal task. It demanded an effort of organization on a greater scale than any ruler had ever attempted before. It was much too great an undertaking to be completed by Cyrus. Begun by him, it was carried through by Darius the Great (521-485 B.C.), whose organization remains one of the most remarkable achievements in the history of the ancient Orient, if not of the world. The rule of Darius was just, humane, and intelligent, but the subject peo-

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ples had of course no voice in government. The Persian sovereign had already come to be called the Great King in the time of Cyrus. All that the Great King decreed was law, and all the peoples bowed to his word. Darius says in the Behistun inscription: "By the grace of Ahuramazda these lands have conformed to my decree; even as it was commanded unto them by me, so was it done." Let us therefore notice an important fact here revealed: this system was not only attempting government on a larger scale than the world had ever seen before, but it was government controlled by *one man*. The ancient world never forgot the example of the vast Persian Empire controlled by one-man power.

In developing his colossal organization, Darius caused himself to be made actual king in Egypt and in Babylonia, but the rest of the Empire he divided into twenty provinces. Each of these provinces was called a satrapy, because it was under a governor called a satrap, who was appointed by the Great King. These arrangements, while similar to those of the Chaldean, Assyrian, and Egyptian empires, were a further development of provincial rule under governors. Indeed the Persian Empire was the first example of a fully organized group of subject peoples and nations ruled as provinces—an arrangement which we may call a provincial system. The subject nations, or provinces under Persian rule, enjoyed a good deal of independence in local matters of their own government as long as they paid regular tribute and furnished recruits for the Great King's army. To discover and prevent local rebellion, such as the revolt of a governor or people against the Persian government, the Great King kept officials residing in each subject state, who were called, after an old Egyptian custom, the King's Ears or the King's Eyes, and whose duty it was to report any evidence of disobedience. All this was an advance upon the rule of the Assyrian Empire.

Farm lands were divided into vast domains held by powerful nobles and other great landowners. There were few small land-owning farmers. All paid dues to help make up the tribute collected from every division of the Empire. In the eastern part of the Empire it was paid, as of old, in produce.

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In the western part of the Empire, chiefly Lydia and the Greek settlements in western Asia Minor, the coinage of metal was common by 600 B.C., and there this tribute was paid in

coined money. The eastern countries — Egypt, Babylonia, and Persia herself—were not quick to adopt this new convenience. Darius, however, began the coinage of gold and permitted his satraps to coin silver. The rate was about thirteen to one; that is to say, gold was worth about thirteen times as much as silver. Thus the great commercial convenience of coined money issued by the state began to be more common in the Near East during the Persian period.



FIG. 88. PERSIAN SOLDIERS

Although carrying spears when doing duty as palace guards, these men were chiefly archers, as is shown by the size of the large quivers on their backs. The bow hangs on the left shoulder. The royal bodyguard may also be seen wielding their spears around the Persian king at the battle of Issus (Fig. 132). Notice the splendid robes worn by these palace guards. The figures are done in brightly colored glazed brick—an art borrowed by the Persians and employed to beautify the palace walls

In general, Darius, like the modern Japanese, showed surprising discernment in selecting the most valuable things in the great civilizations about him for adoption in his own government. He quickly perceived the practical conven-

ience of the Egyptian calendar of twelve thirty-day months, and he introduced it as the calendar of the Persian government. He was likewise impressed with the value of Egyptian medical knowledge. He therefore sent back to Egypt a learned Eryp-

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tian high priest, who was a captive in Persia, and gave him instructions to go to Sais, a city of the western Delta, and to restore there an Egyptian medical school which had fallen into decay. Upon a statue of this high priest, now in the Vatican collections at Rome is engraved an interesting account of how he carried out the orders of Darius and restored the two buildings of the school. One of these was the school building itself and the other was probably the library. Students from the best families were placed in the school, and it was equipped with all needed "instruments," probably for the practice of surgery. The inscription further states: "His majesty [that is, Darius] did this because he knew the value of this art [the practice of medicine], in order to save the life of everyone having sickness." Thus the great Persian established the earliest known medical school as a royal foundation. It was also under Darius that the astronomical studies of the Chaldean astronomer Nabu-rimannu were carried on at Babylon; and similar researches, continued by Kidinnu, likewise took place under Persian rule.

Nothing shows the wise statesmanship of Darius the Great more clearly than his remarkable efforts to make Persia a great sea power. It was no easy task for an inland nation of shepherds and peasants like the Persians, separated from the water by desert shores, to gain control of the sea. Darius was obliged to employ foreign navigators. He dispatched a skillful Mediterranean sailor named Scylax to explore the course of the great Indus River in India. Then Darius ordered him to sail along the coast of Asia from the mouth of the Indus westward to the Isthmus of Suez. Scylax was the first western sailor known to have sailed along this south coast of Asia, so little known to western peoples at that time (about 500 B.C.).

At Suez, Darius restored the ancient but long filled-up canal of the Egyptians connecting the Nile with the Red Sea. Along the ancient route of this canal have been found fragments of great stone tablets erected by Darius. They bear an account of the restoration of the canal, in which we find the words of the Great King: "I commanded to dig this canal, from the stream flowing in Egypt, called the Nile, to the sea

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[Red Sea] which stretches from Persia. Then this canal was dug as I commanded, and ships sailed from Egypt through this canal to Persia, according to my will." Darius evidently cherished what proved to be a vain hope, that the south coast of Persia might come to share in the growing commerce between India and the Mediterranean world. As Persia was now lacking in small landowners, so also was she lacking in small and enterprising merchants, who might have become great promoters of commerce.

Unlike the Assyrians, Darius treated the Phœnician cities with kindness, and succeeded in organizing a great Phœnician war fleet. We shall find that Darius' son Xerxes could depend upon many hundreds of ships for warfare and transportation in the Eastern Mediterranean when such shipping was needed for the invasion of Europe. Thus the more enlightened Persian kings accomplished what the Assyrian emperors never achieved, and Persia became the first great sea power in Asia.

The Persian emperors maintained communication by excellent roads from end to end of the vast Empire. On a smaller scale these roads must have done for the Persian Empire what railroads do for us. Royal messengers maintained a much more complete postal system than had already been introduced under the Assyrian Empire. These messengers were surprisingly swift, although merchandise required about as much time to go from Susa or Persepolis to the Ægean Sea as we now need for going around the world. A good example of the effect of these roads was the incoming of the domestic fowl, which we commonly call the chicken. It was originally a wild jungle hen of India which the East Indians tamed, and it was unknown in the Mediterranean until Persian communications brought it from India to the Ægean Sea.

The ancient Elamite city of Susa, in the Zagros Mountains, was the chief residence and capital. The mild air of the Babylonian plain, however, attracted the sovereign during the colder months, when he went to dwell in the palaces of the vanished Chaldean Empire at Babylon. In spite of its remoteness the earlier kings had made an effort to live in their old Persian home. We have seen that Cyrus built a splendid pal-

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ace at Pasargadæ near the battlefield where he had defeated the Medes, and Darius also established a magnificent residence at Persepolis, some forty miles south of the palace of Cyrus. It is near the ruins of Persepolis that the tombs of Darius, Xerxes, and the later emperors still stand in their native Persia.

The Persian builders had to learn architecture from the old oriental peoples now subject to Persia. The enormous terraces on which the Persian palaces stood were imitated from Babylonia. The winged bulls at the palace gates and the magnificent stairways leading up to them were copied from those of Assyria. The vast colonnades stretching along the front and filling the enormous halls—the earliest colonnades of Asia—had grown up over two thousand years earlier on the Nile.¹ Likewise the gorgeously colored palace walls of enameled brick reached Persia from the west. Thus the great civilizations over which the Persian emperors ruled were merged together in the life of their Empire.

Such a consolidation of the civilizations of the ancient Near East into one vast organization produced a new situation, and one of tremendous importance for the history of Europe. We have seen that Cyrus had carried his victories westward to the shores of the Ægean Sea, and the Greek cities of western Asia Minor fell under Persian sway. Thus the oriental colossus arose directly alongside southeastern Europe. If we look at a map and realize that the western advance of the great Empire finally extended, under Darius, to include European territory as far as the Danube, we shall understand that a hostile collision with Greece was unavoidable. This situation was yet to bring about a more complete commingling of the civilizations of the Near East with the life of neighboring Europe than had ever been possible before. These wars between Persia and Europe were not of any great importance to Persia, but they were epoch-making for little European na-

¹ It is interesting to note that the Persians did not adopt the arch from Babylonia. On the contrary, each door in the palace of Darius is topped with a *horizontal* block of stone, called a lintel, copied from Egyptian doors.

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tions like the Greeks, and we must therefore take them up later as a part of the history of Greece.

For the oriental world as a whole, Persian rule meant about two hundred years of peaceful prosperity (ending about 330

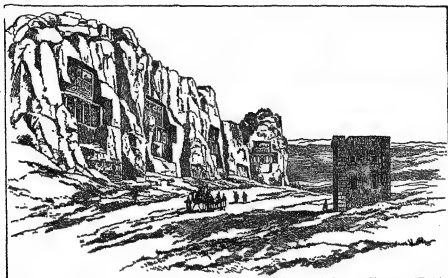


FIG. 89. TOMBS OF THE EARLIER KINGS OF PERSIA NEAR PERSEPOLIS

After Cyrus and his son Cambyses had passed away, the Persian kings, beginning with Darius, excavated their tombs in the face of this cliff, a short distance from Persepolis. Here then are the tombs of Darius the Great, Xerxes, Darius II, and Artaxerxes I. The remaining three royal tombs belonging to the last three kings of the Achæmenian line—Artaxerxes II, Artaxerxes III, and Darius III—are cut in the cliff behind the palaces of Persepolis. Including the tomb of Cyrus (Fig. 84), we thus have the tombs of all nine of the great kings of Persia, except that of Cambyses, the conqueror of Egypt, which has never been found. The door of the burial chamber in each tomb is in the middle of the colonnaded front. Above this colonnade is a square containing a sculptured picture of the king worshipping Ahuramazda before a fire altar. All these tombs were broken open and robbed in ancient times, like the tomb of Cyrus, and all are now empty except that inside, in niches, still rest the massive stone coffins in which Darius, Xerxes, and the other kings and their families were buried

B.C.). The Persian kings, however, as time went on, were no longer as strong and skillful as Cyrus and Darius. They loved luxury and ease, and left much of the task of ruling to their governors and officials. This meant corrupt and ineffective government; the result was weakness and decline.

The later world, especially the Greeks, often represented

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the Persian rulers as cruel and barbarous oriental tyrants. This unfavorable opinion is certainly not justified so far as it refers to the earlier Persian rulers. Some of the Persian emperors felt a deep sense of obligation to give just government to the nations of the earth. Darius the Great in the Behistun inscription says: "On this account Ahuramazda brought me help, . . . because I was not wicked, nor was I a liar, nor was I a tyrant, neither I nor any of my line. I have ruled according to righteousness." There can be no doubt that the Persian Empire, the largest the ancient world had thus far seen, enjoyed a government far more just and humane than any that had preceded it in the East.

Many such statements as that of Darius just quoted show that the Persian rulers were devoted followers of Zoroaster's teaching. Their power carried this noble faith throughout Western Asia and especially into Asia Minor. Here Mithras, regarded by Zoroaster as a helper of Ahuramazda, appeared as a hero of light, and finally as a Sun-god, who gradually outshone Ahuramazda himself. From Asia Minor Mithras passed into Europe; and, as we shall see, the faith in the mighty Persian god spread far and wide through the Roman Empire, to become a dangerous competitor of Christianity; for in matters of religion, as in many other things, the Persian Empire completed the breakdown of national boundaries and marked the beginning of a long period when the leading religions of the East were called upon to compete in a great contest for the mastery among all the nations.

Persia was the last great power of the ancient Near East. We must turn westward to watch the farther advance of our civilization. But let us look back and see how much had been accomplished by the early oriental peoples. The ancient Near East had made for the first time a whole group of inventions, which have since been surpassed only by those of the modern world. The oriental peoples were the first to build up art, architecture, literature, and science. They had the earliest known written laws and had also developed the earliest belief in one God and his fatherly care for all men. On the other hand, the East had always accepted as a matter of course the

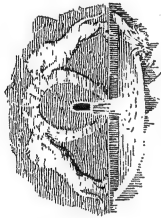
rule of a king. It had never occurred to anyone there that the *people* should have anything to say about how they should be governed. Liberty, as we understand it, was unknown, and the rule of the people, which we call democracy, was hardly dreamed of. Just as the Orientals accepted the rule of *kings* without question, so they believed in the rule of *gods*. This limited their ideas of the world about them. They thought that every storm was due to the interference of some gods, and that every eclipse must be the act of an angry god or demon. Hence the Orientals made little inquiry into the *natural* causes of things. Under these circumstances natural science could not go very far, and religion was much darkened by superstition, while art and literature lacked some of their greatest sources of stimulus and inspiration.

There were, therefore, still boundless things for mankind to do—in government, in thought about the natural world, in gaining deeper views of the wonders and beauties of nature, as well as in art, in literature, and in many other lines. This future progress was to be made in Europe—that Europe which we left at the end of our second chapter in the Neolithic Age. To Europe we must now turn to follow across the Eastern Mediterranean the course of rising civilization as it passed from the ancient Near East to our European forefathers from four to five thousand years ago.

PART III
THE GREEKS



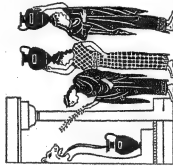
Spring in Rock at Megiddo, Late Second Millennium B.C.



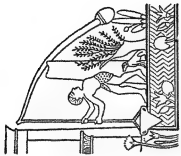
Assyrian Fountain at Babylon, about 700 B.C.



A Greek Athlete Draws Water from a Well. (Vase Painting, Fifth Century B.C.)



Greek Public Fountain. (Vase Painting about Sixth Century B.C.)



The Shadoof. (Egyptian Tomb Painting, about 1200 B.C.)



Water Pipe with Tap in a House at Pompeii, First Century A.D.

SOURCES OF COMMUNITY AND HOUSEHOLD WATER SUPPLY IN THE ANCIENT WORLD

THE EASTERN MEDITERRANEAN WORLD AND
THE GREEK CONQUEST*The Ægean Civilization: The Islands*

CIVILIZATION first appeared in Europe at its southeastern corner. If we look at a map, we shall find that Europe here thrusts forward its southernmost and easternmost peninsula (Greece), with its island outposts, especially Crete, reaching far out into the oriental waters so early crossed and recrossed by Egyptian ships. It was thus very natural that the people of this southeastern region of Europe should have been the first of all Europeans to learn something of civilization, already so many centuries old in the Near East directly alongside them.

The most important center where civilization first appeared in Europe was the Ægean Sea. This sea is like a large lake, almost completely encircled by the surrounding lands. Around its western and northern sides stretches the mainland of Europe, on the east is Asia Minor, while the long island of Crete on the south lies like a breakwater shutting off the Mediterranean from the Ægean Sea. From north to south this lake-like sea is at no point more than four hundred miles in length, while its width varies greatly. Its coast is deeply indented with many bays and harbors, and it is so thickly sprinkled with hundreds of islands that it is often possible to sail from one island to another in an hour or two. Indeed it is almost impossible to cross the Ægean without seeing land all the way, and in a number of directions at the same time. Just as Chicago, Milwaukee, and other towns around Lake Michigan are linked together by modern steamboats, so we shall see incoming civilization connecting the shores of the Ægean by sailing-ships.

This region of the Mediterranean enjoys a mild and sunny climate, for it lies in the belt of rainy winters and dry summers. Along the bold and broken, but picturesque and beautiful, shores, river valleys and small plains descend to the water's edge. These places furnish soil of sufficient extent so that wheat and barley, grapes and olives, may be cultivated

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without irrigation. Hence bread, wine, and oil were the chief food, as among most Mediterranean peoples to this day. Wine is their tea and coffee, and oil is their butter. So in the Homeric poems bread and wine are spoken of as the food of all, even of the children. In the wet season the uplands are clothed with rich green pastures, where the shepherds may graze the flocks which dot the hillsides far and near. Few regions of the world are better suited to be the home of happy and prosperous communities, grateful to the gods for all their plentiful gifts by land and sea.

The Ægean islands were touched by the civilized life of their oriental neighbors on the south and on the east. On the south a voyage of only one hundred and eighty miles separated the northern coast of Africa from the nearest southern port of Crete. On the east was Asia Minor, the land of the Hittites, crossed by highways leading to the Fertile Crescent. We see here, then, that the older oriental civilizations converged upon the Ægean by two routes: first, by ship across the Mediterranean from Egypt; second, by land through Asia Minor from the Two Rivers. So the Ægean islands formed, as it were, a bridge over which elements in the older civilizations slowly passed on their way to the Western World. It was on the *Ægean islands*, furthermore, and not on the *mainland* of Europe, that the earliest high civilization on the north side of the Mediterranean grew up.

It is convenient to call the earliest inhabitants of this region Ægeans, although the term is not racial but purely geographical. Among the Ægeans were descendants of Highland people from Asia Minor, but the majority of the Ægeans, the predecessors of the Greeks in the northern Mediterranean, belonged to the Mediterranean race. At a time far earlier than any of our written records they not only occupied the mainland of Greece and the islands of the Ægean, but had also settled on the neighboring shores of Asia Minor.

From the beginning the leader among the island peoples was Crete. In the Neolithic period there were already close communications between Crete and Asia Minor. Emigrants from Asia Minor had settled on the island and brought with

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them the Neolithic life of the Highland Zone, including the belief in the great Earth-Mother. As a result the religion of Crete always had many beliefs in common with the Highland peoples of Asia Minor. Until as late as about 3000 B.C. the island of Crete was still following a Neolithic manner of life largely drawn from Western Asia. At Cnossus the wreckage of huts of this period was found buried thirty-five feet under the ruins of the palaces later erected there. Some copper implements discovered in this Neolithic settlement indicate that metal was beginning to be brought into Crete, most likely by ships from the Nile.

At the time when the great pyramids of Egypt were being built the Cretan craftsmen learned from their Egyptian neighbors the use of the potter's wheel and the closed oven. They could then shape and bake much finer clay jars and vases. By copying Egyptian stone vessels they learned also to hollow out hard varieties of stone and to make beautifully wrought stone vases, bowls, and jars. These new products of Cretan industries are so much like the work of the Egyptian craftsmen, whose workshops were pictured on the tomb-chapel walls of the Pyramid Age, that it has been thought there must have been a colony of workmen from the Nile who actually migrated from Egypt to Crete, where they instructed Cretan craftsmen. The same influence is observable in the growth of Cretan writing. Like the Egyptians and Babylonians the Cretans employed at first rude picture signs. On the tablets so far examined the number of these picture signs, or hieroglyphs, is about one hundred and thirty-five. Later, under Egyptian influence, the Cretans developed a more convenient system (p. 242).

By 2000 B.C. the Cretans had become a highly civilized people. Near the coast, for convenient access to ships, were the manufacturing towns with thriving industries in pottery and metal-work, which enabled them to trade with other people. Farther inland the green valleys of the island must have been filled with prosperous villages cultivating their fields of grain and pasturing their flocks. At Cnossus, not far from the middle of the northern coast, there grew up a kingdom which

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may finally have included a large part of the island. The Neolithic town at Cnossus had long since fallen to ruin and been forgotten. Over a deep layer of its rubbish a line of powerful Cretan kings now built a fine palace arranged, in the Egyptian



FIG. 90. TWO CRETAN VASES SHOWING PROGRESS IN THE ART OF DECORATION

The first vase (A) is an example of the earlier pottery, painted on a dark background with rich designs in white, orange, crimson, red, and yellow. The potters who made such vases were, together with the seal-cutters, the first really gifted decorative artists to arise in Crete. They flourished from 2000 B.C. onward, in the days of the first palace of Cnossus. We should notice that their designs do not picture carefully anything in nature, like flowers or animals (even though a hint of a lotus flower appears in the angle of the spiral), but the figures are almost purely *imaginative* and drawn from Egyptian art. The second vase (B), however, some five hundred years later than the first, shows how the artists of the Grand Age had learned from Egyptian decorative art to take their decorative figures from the *natural* world, for the design consists chiefly of Egyptian lotus flowers. Such designs were no longer in many colors; on this jar, indeed, they are molded in relief. This jar (B) is nearly four feet high, much larger than the first example (A)

manner, with a large cluster of rooms around a central court. Toward the south shore there arose another palace at Phæstus, perhaps an additional residence of the same royal family or the capital of a second kingdom.

These palaces were not fortified castles, for neither they nor the towns connected with them possessed any protecting walls.

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But the Cretan kings were not without means of defense. They already had their palace armories, where brazen armor and weapons were stored. Hundreds of bronze arrow-heads, with the charred shafts of the arrows, along with written lists of weapons and armor and chariots, have been found still lying in the ruins of the armory rooms in the palace at Cnossus. Troops to use these weapons were of course not lacking. Moreover, the Cretan kings early began to build ships both for commerce and for warfare, and it has become a modern habit to call them the "sea-kings of Crete."¹

Cretan industries henceforth flourished as never before. The potters of Cnossus began to produce exquisite cups as thin and delicate as modern porcelain teacups. These and their pottery jars and vases they painted in bright colors with decorative designs, which made them the most beautiful ware to be had in the East. Such ware was in demand in the houses of the rich as far away as the Nile, just as fine French table porcelain is widely sold outside of France at the present day. The new many-colored Cretan vases were so highly prized by the Egyptian nobles of the Feudal Age that they even placed them in their tombs for use in the next world. In these Egyptian tombs modern excavators have recovered them, to tell us the story of the wide popularity of Cretan industrial art in the nineteenth and twentieth centuries B.C. Egyptian ships, common in the Eastern Mediterranean before 3000 B.C., must have been frequent visitors in the Cretan harbors. At the same time the prevailing north wind of summer easily carried the galleys, which the Cretans had learned to build, across to the harbor in the western corner of the Nile Delta, which had flourished there since the days of the First Union. In Egypt the Cretans found a good market for their wares, which they exchanged for many things not found in Crete. Thus commerce between Crete and the Nile was constant.

¹ The sea power of the Cretans has been much exaggerated by recent writers. One of the old Cretan sea-kings, according to later tradition, was named Minos. For this reason early Cretan civilization has been called Minoan, which is now the most common term applied to it, but in this book we have used the term "Ægean." For the term "Mycenæan," see p. 250.

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About 1600 B.C. the Egyptians and the Cretans both advanced to a new period of power and splendor. This advance created a civilized world of the Eastern Mediterranean, which was to be the source of civilization for Europe and the West. It arose like a great light whose beams penetrated to the gates of the Atlantic at the west end of the Mediterranean and far across the Neolithic settlements of Europe, which still lay in the darkness of stagnant barbarism.

In this new age the expansion of Cretan business began to require much greater speed and convenience in writing than was possible in using the old picture signs. As a result, just as in Egypt and Babylonia, these picture signs were gradually

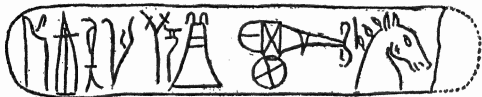


FIG. 91. CLAY TABLET WITH CRETAN INSCRIPTION

The pictures of horse and chariot at right suggest that this inscription may refer to equipment for war. (After Sir Arthur Evans)

much abbreviated and reduced to simpler forms, each picture thus becoming only a few strokes. In this more rapid hand, called *linear* writing, the pictures had mostly disappeared, and the number of signs seems to have been less than a hundred. Crete had no papyrus marches and therefore could not manufacture papyrus paper. Cretan ships, however, had brought back clay-tablet bills of merchandise from the ports of Asia, and thus the Cretans learned to write their new linear hand on clay tablets. In the armory of the new palace which had arisen on the ruins of the old one at Cnossus, the chests of arms and weapons had each a clay-tablet label hanging in front of it. Great numbers of such clay tablets stored in chests seem to have contained the records, invoices, and book-keeping lists necessary in conducting the affairs of a large royal household. Masses of these have been found covered by the rubbish and ruins of the fallen palace. In spite of much

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study, scholars are not yet able to read these precious records, the earliest-known writing on the borders of the European world.

In the closest contact with Egypt, Cretan civilization now arose to its highest level, and the Cretans entered upon what we may call their Grand Age (1600-1400 B.C.). As we have mentioned, the older palace of Cnossus had been succeeded by a larger and more splendid building (Fig. 92). In the works of art which filled it we can watch the life of Crete unfolding in all directions. The new palace itself, with its colon-naded hall, its fine stairways, and its impressive open areas represented the first real architecture in the northern Mediterranean. The palace walls were painted with fresh and beautiful scenes from daily life, all aquiver with movement and action; or, by adopting the Egyptian art of glass-making, the Cretans adorned them with glazed figures attached to the surface of the wall. The pottery-painters had by this time given up the use of many colors. They now

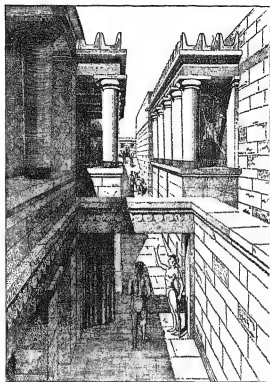


FIG. 92. RESTORATION OF NORTH ENTRANCE PASSAGE IN CRETAN PALACE OF THE GRAND AGE AT CNOSSUS

In the foreground may be seen the inner gateway before which the sentinel stands. On the other side of the gate the passage rises toward the central court. Overlooking the ascending passage on either side are porticos, upon the walls of which were painted scenes of bull-catching and bull-grappling. This restoration was made by Sir Arthur Evans, whose remarkable excavations at Cnossus not only have uncovered the royal palaces but have revealed the whole development of Cretan civilization beginning back with the Stone Age settlement over which the palaces were built. (After Sir Arthur Evans)

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employed one dark tone on a light background, or they modeled the design in relief. Noble vases were painted in grand designs drawn from plant life or often from the life of the sea, where the Cretans were now more and more at home. This wonderful pottery shows the most powerful, vigorous, and impressive decorative art of the early oriental world. Indeed, it belongs among the finest works of decorative art ever produced by any people.

The method of use and the execution of the work everywhere show that this art was developing under suggestion from Egypt; for example, walls covered with colored glazed tiles were in use in Egypt nearly two thousand years earlier than in Crete. But in spite of this fact the Cretan artist did not follow slavishly the Egyptian model. A growing plant painted on an Egyptian wall seems sometimes so rigid and stiff that it looks as if done with a stencil. The Cretan artist, on the other hand, drew the same plant with such free and splendidly curving lines that we seem to feel the wind swaying the stems and giving us "the soft eye-music of slow-moving boughs." The Cretan sculptor in ivory too, as well as the goldsmith and artificer in bronze, wrought masterpieces which remain today among the world's greatest works of art. It is clear that the splendid creations of these free and vigorous artists of Crete had a great influence upon the art of their teachers in Egypt.

The palace of Cnossus looked out upon a town of plain, sun-dried brick houses. Immediately surrounding the palace was a residential quarter of the larger houses occupied by the nobles and the wealthy Cretans, probably including also the prosperous ship-owning merchants. The extent of the dwellings in this aristocratic palace quarter would indicate that it housed about twelve thousand people. Outside of the palace quarter was a broad fringe of smaller and poorer houses which sheltered the traders, potters, metal workers, painters, and other craftsmen, though many of these also lived and worked in the palace itself. This surrounding industrial quarter may have had a population of some seventy thousand souls. Thus

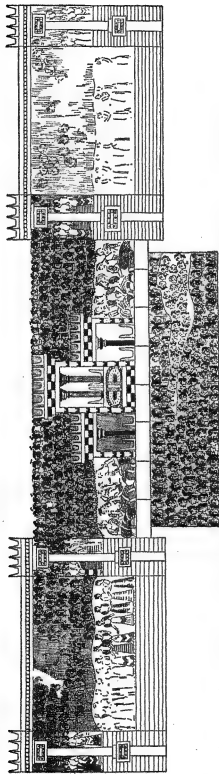


FIG. 93. CRETAN LORDS AND LADIES ON THE TERRACES OF THE PALACE OF CNOSSUS

This scene was painted on the walls of the palace as part of the interior wall decoration. It has been somewhat restored as shown above, but it forms a remarkable example of the Cretan artist's ability to produce the impression of an animated multitude of people seen from a distance and blending into a somewhat confused whole. Some of the women have been painted in detail, but the heads of many more have been sketched lightly on the white background. As a whole the men are distinguished by a broad wash of dark background. (Combined and restored after Sir Arthur Evans)

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the city of Cnossus, with probably over eighty thousand people, was the first large city of Europe.

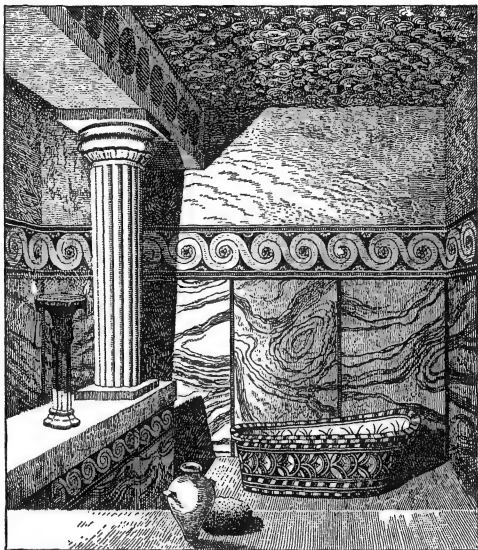


FIG. 94. BATHROOM OF QUEEN'S APARTMENT IN THE CRETAN PALACE OF THE GRAND AGE AT CNOSSUS

A restored view with the bath tub in place. A frieze of running spirals with rosettes above the gypsum wall slabs, together with the charming decoration of conventionalized papyrus plants on the terra-cotta tub, makes this ancient bathroom quite as attractive as one of ours today. The tub was probably filled at a cistern in a room at the back and emptied, after the bath, into a sink with drain found in the same place. (After Sir Arthur Evans)

The lords and ladies of this first city of Europe lived an astonishingly free and modern life. The ladies crowded the

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palace terraces or grandstands and watched their champions struggling in fierce boxing-matches, in which the contestants



A



B



C

FIG. 95. ÆGEAN ACROBATS IN THE BULL-RING

A is a much-broken wall painting; *B* is a small bronze. In *C* Sir Arthur Evans has suggested in a modern drawing his idea of the successive positions of the bull and the athlete (numbered from 1 to 4) based on a study of *A* and *B* and other ancient sources. As the bull charges, the performer seizes the horns of the animal (*A*, and *C*, 1). Thereupon the bull attempts to toss the acrobat, thus lifting him and enabling him to complete his first backward somersault, so that, letting go the horns of the bull, the acrobat lands on the animal's back. He then either comes down on his hands on the bull's back and shifts to his feet (*A*, and *C*, 3) or he reaches his feet immediately on relinquishing the horns (*B*). Finally, standing on the back of the galloping bull, the athlete takes off in a final leap (*C*, 4). Both boys and girls engaged in this dangerous sport. Modern rodeo experts have reported that these acrobatic feats which seem to be clearly indicated by the ancient sources, are quite impossible, at least to modern cowboys and circus performers. (After Sir Arthur Evans)

wore heavy metal helmets; or the assembled court cheered the plucky bull-fighters tossed on the horns of huge wild bulls—

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descendants of those fierce creatures which were hunted by the men of Neolithic Europe several thousand years before (Fig. 13). Some of these people lived in comfortable quarters in the palace, where they even had bathrooms and sanitary drainage.



FIG. 96. CRETAN CARVED STONE VASE, KNOWN AS THE "HARVESTERS" VASE

The scene depicts a procession of Cretan peasants with wooden pitchforks over their shoulders. Among them is a chorus of youths, or possibly maidens, with wide-open mouths, lustily singing a harvest song, doubtless in honor of the great Earth-Mother, to whom the peasants believed they owed the fertility of the earth. The music is led by a priest with head shaven after the Egyptian manner, and he carries upraised before his face a sistrum, a musical rattle which came from Egypt. The work is so wonderfully carved that we seem to feel the forward motion of the procession.

The lower part of the vase is lost

From the palace of Cnossus the Cretan king could issue at the North Gate and, mounting his chariot, ride in half an hour to the harbor, three and a half miles away. At the harbor he looked out northward, where the nearest islands of the *Ægean* could be clearly seen breaking the northern horizon. Here the trading-galleys of the Cretan kings were spreading Cretan art and industries not only among the islands of the *Ægean*, but also far and wide through the Mediterranean. The works of Cretan craftsmen are found as far east as Cyprus.

In the west excavation has uncovered the products of Cretan

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craftsmen in Sicily, and very plentifully on the Mediterranean coast of Spain. Southward from the capital the sea-kings laid out the first built road in Europe—a highway across the island leading to the ports on the southern coast. There were the busy docks piled high with the merchandise en route to and from the already ancient land of the Nile. The Cretan fleets formed the earliest naval power which grew up in the northern Mediterranean. Nevertheless, the kings of Crete may not have been wholly independent. An Egyptian general of Thutmose III in the fifteenth century B.C. bore the title of "governor of the islands in the midst of the sea," as the Egyptians called the islands of the Ægean. The sea-kings at Cnossus, therefore, may have come to terms with the Pharaohs as their overlords.

Here, then, in the island of Crete, there had arisen a new world. The culture of the gifted Cretans, stimulated by the magic touch of riper Egyptian culture, shook off the lethargy of Neolithic Europe and sprang into a vigorous life all its own. Besides the two older centers of civilization on the Nile and the Two Rivers in this age, there thus grew up here in the Eastern Mediterranean, as a *third* great civilization, this splendid world of Crete and the Ægean Sea. It is this *third* great civilization which forms the chief link between the civilization of the ancient Near East and the later progress of man in Greece and western Europe. As we have already seen, Asia Minor was also a very important link between the Near East and Europe. To the mainland, therefore, we must now turn; first in Europe and then in Asia Minor.

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The mainland, both in Europe and in Asia Minor, had continued to lag behind the advanced civilization of the islands. Nevertheless the fleets of Egypt and of Crete extended their commerce to the mainland of Greece. They naturally entered the southern bays, and especially the Gulf of Argos, which looks southward directly toward Crete. In the plain of Argos behind the sheltered harbor, it is not impossible that Cretan

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nobles, migrating to the mainland, established their settlements. Exposed as they

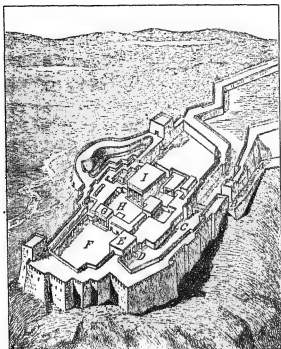


FIG. 97. RESTORATION OF THE CASTLE AND PALACE OF TIRYNS

Unlike the Cretan palaces, this dwelling of an Ægean (or perhaps Greek) prince is massively fortified. A rising road (A) leads up to the main gate (B), where the great walls are double. An assaulting party, bearing their shields on the *left* arm, must here (C, D) march with the exposed *right* side toward the castle. By the gate (E) the visitor arrives in the large court (F) on which the palace faces. The main entrance of the palace (G) leads to its forecourt (H), where the excavators found the place of the household altar of the king. Behind the forecourt (H) is the main hall of the palace (I). This was the earliest castle in Europe with outer walls of stone. The villages of the common people clustered about the foot of the castle hill. The whole formed the nucleus of a city-state in the plain of Argos. (After Luckenbach)

were to barbarian migrations from the north, they dared not live without protecting walls, as the sea-kings of Crete were doing. At Tiryns and Mycenæ they built massive strongholds, with foundations and walls of heavy stone masonry. The Ægean princes who built such strongholds a little after 1500 B.C. imported works of Cretan and Egyptian art in pottery and metal. These triumphs of Cretan art, with fragments of Egyptian glaze and wall decorations, still surviving in the ruins of palaces and tombs, are today the earliest tokens of a life of higher refinement on the continent of Europe. This period (about 1500 to 1200 B.C.) is commonly known as the Mycenæan Age, after Mycenæ, where such civilization was first discovered.

Civilization spread in only a narrow fringe along the coast and did

not penetrate far inland. Regions of northern Greece, such

as Thessaly, were still dotted with scattered settlements which had advanced but little beyond the Neolithic stage. Metal, although known, was not common in Thessaly until about 1500 B.C., and the cultured Cretans had at first little influence here in the north.

For a thousand years after the rise of the brilliant Cretan civilization the Neolithic towns and villages behind Thessaly still stretched northward and westward far across Europe. The smoke of their settlements rose through the forests and high over the lakes and valleys of Switzerland. Their roofs dotted the plains and nestled in the inlets of the sea, whence they were thickly strewn far up the winding valleys of the rivers into inner Europe. It was therefore the rivers which furnished the natural routes along which the products of Near Eastern civilization were carried by the traders into the interior of Europe. We have already seen that the most important of these routes was the valley of the Danube; for the lower course of the Danube is nearer to Asia Minor and the Near East than any other great river of Europe. Moving up the Danube, the trade from the Near East now passed down the Rhine to the North Sea, or, turning southward, followed the Rhone to the Western Mediterranean and the coasts of Spain.

The visits of the traders who traversed these river routes from the coast were welcome events. Their wares were eagerly purchased. Some of the villagers bargained for decorated jars of pottery; but such things were fragile and could not be carried far by land, or in quantities. Others preferred necklaces of glittering blue glaze beads. Great was the interest when the traders exhibited shining beads or neck-rings of a strange, heavy, gleaming, reddish substance, so beautiful that the villagers trafficked eagerly for them. Most desired of all, however, was the dagger or ax-head made of the same unknown substance. Such ax-heads, though they were much thinner than the stone axes, did not break like these, and could be ground to a better edge than the ground-stone ax ever gained. We can imagine with what rapt attention and awestruck faces these early Europeans listened to the trader's tales, telling of

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huge ships which brought such products to Europe, and which made the rude European dugouts look like tiny chips. Thus at the dawn of history, barbarian Europe looked across the sea to the great civilizations of the Nile, the Ægean, and Western Asia, as the North American Indians fixed their wondering eyes on the first Europeans who landed in America, and listened to like strange tales of great and distant peoples.

Slowly Europe learned the use of metal. Having reached the islands of southeastern Europe about 3000 B.C., metal passed by slow stages, in the course of a thousand years, into northern and western Europe. It long continued to be used side by side with stone, and it was nearly 2000 B.C. before it gained the leading place as the material for tools and weapons. In the beginning the metal used was copper, but some time before 2000 B.C. tin was discovered in Bohemia. Shortly thereafter the farmers along the Danube learned to produce bronze, and developed the earliest independent Bronze Age culture on the continent of Europe. Thence it spread widely, especially westward and northward, up the Danube Valley, just as agriculture and cattle-breeding had done long before.

It was these Danubian craftsmen who produced a sword with enough weight in the blade to make it a *striking* weapon. The *striking* sword, which might be brought down upon the foe like the blow of an ax, was far more formidable than the *thrusting* sword, which, as it had been received from Egypt, was only an elongated dagger. The possession of this heavy striking sword gave Europe an enormous military advantage over the Near East and was yet to alter the course of history.

Notwithstanding the rise of this important Danubian civilization and the development of a more civilized life in general, the Bronze Age peoples of Europe did not advance to a high type of civilization. They still remained everywhere without writing, without architecture in hewn-stone masonry, and without large sailing-ships for commerce. The failure to make progress in architecture beyond such rough stone structures as Stonehenge is an illustration of this backwardness of western and northern Europe. It proves clearly the failure of Bronze

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Age Europe to bring forth a high civilization such as we have found in the ancient Near East.

Along the Asiatic side of the Ægean Sea we find much earlier progress than on the European side, although this was but slightly due to the commerce from Crete, which seems to have had little effect along the shores of Asia Minor. Until after 3000 B.C. all Asia Minor was still without metal, but excavation has not yet found many of the Neolithic settlements which were probably scattered far across the hills and valleys of the Highland Zone. In the days when Crete was first receiving metal there arose at the northwest corner of Asia Minor a shabby little village known to us as Troy. It was probably built by traders attracted by the profitable traffic which was already crossing back and forth between Asia and Europe at this point.

By 2500 B.C., some centuries after the first metal had been introduced, the rulers of Troy were wealthy commercial kings, and their castle was the earliest fortress in the Ægean area, for it was a thousand years older than the fortresses at Mycenæ and Tiryns. During this thousand years (2500 to 1500 B.C.) Troy was rebuilt several times and, even when conquered and destroyed, it always regained its prosperity. One cause of this prosperity was probably the importation of tin from the Danube and the development of a profitable industry in bronze. Finally Troy must have controlled a kingdom of considerable extent in northwestern Asia Minor. Thus about 1500 B.C. the splendid and cultivated city of Troy was a powerful stronghold (Sixth City), which had grown up as a northern rival of that sumptuous Cnossus that we have seen in the south. The two rival cities faced each other from opposite ends of the Ægean, but we infer that Cnossus was superior in civilization, for it is still uncertain whether the Trojans of this age could write.

We have been putting together the story of the rise and early history of civilization in the Ægean islands and in neighboring Europe and Asia. Only a few years ago this story was entirely unknown. As late as 1870 no one supposed that civilized people had lived in the Ægean area before the Greeks

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arrived there. Much less did anyone dream that we should ever be able to find there the actual handiwork of the predecessors of the Greeks. The discoverer of the *Ægean* civilization was Heinrich Schliemann.

It was as the fulfillment of a dream of his youth¹ that, in 1870, Schliemann led a body of Turkish laborers to begin excavations in the great mound of Troy. In less than four years



FIG. 98. THE MOUND CONTAINING THE NINE CITIES OF ANCIENT TROY
(ILIUM)

When Schliemann first visited this mound in 1868, it was about 125 feet high, and the Turks were cultivating grain on its summit. In 1870 he excavated a pit like a crater in the top of the hill, passing downward in the course of four years through nine successive cities built each on the ruins of its predecessors. At the bottom of his pit Schliemann found the original once bare hilltop, about 75 feet high, on which the men of the Stone Age had established a small settlement of sun-baked brick houses about 3000 B.C. Above the scanty ruins of this Neolithic settlement rose, in layer after layer, the ruins of the later cities, with the Roman buildings at the top

he uncovered the central portions of nine successive cities. The entire depth of fifty feet of ruins represented a period of about thirty-five hundred years from the First (Stone Age) City to the Ninth (or Roman) City. The Second City contained the earliest copper found and a splendid treasure of golden jewelry. This Schliemann believed to be the Troy of Homer's Greek heroes, but we now know that this Second City

¹ Schliemann was an American citizen of German birth. Before coming to America he had been shipwrecked on the coast of Holland, where he began business, while a mere lad, as a clerk in a little grocery. In the brief intervals of leisure between dealing out smoked herring and rolls of butter he taught himself Greek and began to read Homer. In the infatuated ears of this enthusiastic boy the shouts of the Greek heroes on the plain of Troy mingled with the jingle of small change and the rustle of wrapping-paper in the dingy little Dutch grocery. He had not lost this fascinating vision of the early world when, years afterward, he retired from business, after having won a large fortune in Russian petroleum.

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was built a thousand years before Homer's Troy, which was the Sixth City (Fig. 99).

The sensation aroused among the scholars of Europe and America by these discoveries was mild compared with that which followed when Schliemann, crossing to the mainland of

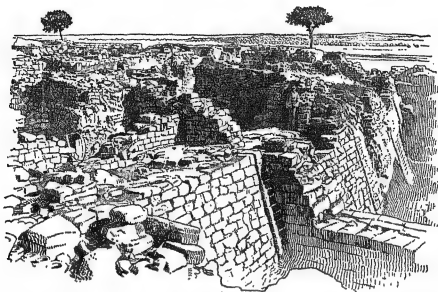


FIG. 99. THE WALLS OF HOMERIC TROY (BUILT ABOUT 1500 B.C.)

A section of the outer walls of the Sixth City in the mound of Troy. The sloping outer surface of the walls faces toward the right; the inside of the city is on the left. These are the walls built in the days when Mycenæ was flourishing—walls which protected the inhabitants of the place from the assaults of the Greeks in a remote war which laid it in ruins after 1200 B.C.—a war of which vague traditions and heroic tales have survived in the Homeric poems. The walls of the houses of the Seventh City are visible here, resting on those of the Sixth. Schliemann never saw the walls of the Sixth City, because as he dug down in the middle of the mound inside the ancient walls, he covered the walls of the Sixth City with the rubbish he dug out

Greece, began excavating the prehistoric fortress or castle of Mycenæ. Here he found a group of tomb chambers containing a magnificent series of vessels and ornaments in gold, including an elaborate golden crown, indicating the royalty of one of the dead. Again Schliemann thought that these things belonged to the Greek heroes of the Trojan wars, but in reality they were older. At the neighboring prehistoric castle of Tiryns Schliemann made similar discoveries. Thus within a few years there

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was disclosed to the world a new and entirely unknown civilization which had flourished in the Ægean for centuries before the Greeks appeared there.

The question of the original home of this early Ægean civilization, however, was not settled by Schliemann's work. Since 1900 the excavations in Crete have revealed it as the place where Ægean civilization made its start, and the center from which it passed to the other islands and to the mainland of Greece at Tiryns and Mycenæ. American explorers have had an honorable share in these discoveries, but the credit has been due chiefly to the remarkable excavations of Sir Arthur Evans, the English archeologist, at the city of Cnossus.

These discoveries, added to the earlier story of discovery in the Near Eastern lands east and south of the Mediterranean, show us how civilized peoples all around the eastern end of the Mediterranean, by their industries and commerce, were gradually creating a civilized world of which the Ægean Sea was merely a northern bay. We recall that our first glimpse of this Eastern Mediterranean world was gained from the representations of Egyptian ships which crossed the Eastern Mediterranean nearly three thousand years before the Christian era. Now we know that, at the close of the Grand Age in Crete, the splendid Ægean civilization had been mingling for centuries with the older Near Eastern civilizations, especially that of the Nile, but also with that of Hittite Asia Minor, and through it with the civilization of the Fertile Crescent.

We have seen how the successive Indo-European migrations penetrated the Fertile Crescent and Asia Minor. We are now to see these Indo-European invasions entering likewise the Eastern Mediterranean world. Into this civilized world of the Eastern Mediterranean, with its arts, its industries, and its far-reaching commerce, the uncivilized Indo-Europeans of the north, from behind the Balkan mountains and the Black Sea, were now beginning to intrude. These uncivilized northern Indo-Europeans included, besides others, the earliest Greeks. They were soon to overwhelm the Eastern Mediterranean, and with these northern intruders we must begin not only a new

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chapter in the history of the Eastern Mediterranean world, but an entirely new epoch in the history of man.

The Coming of the Greeks

We have watched the invading Indo-European peoples conquering first the Highland Zone, then the Fertile Crescent, and finally even Egypt. Thus in the two thousand years between 2500 and 500 B.C. the Indo-Europeans took possession of practically the entire Near East. We must notice the difference between the invasion of an army, which is not usually lasting, and a permanent migration. The Indo-European immigrants actually settled, in the East, mainly in the Highland Zone, and to some extent also in the Fertile Crescent. These important movements caused great changes not only on the Asiatic and African mainland, but likewise in the entire Eastern Mediterranean world. The Indo-European immigrants who had entered Europe were already moving toward the Ægean area as far back as 2000 B.C. These Indo-Europeans who were drifting into Europe and thus southward into Greece were a large group of tribes whom we now call Greeks. While their eastern kindred were moving southward on the *east* side of the Caspian as we have seen, the Greeks on the *west* side of the Black Sea were likewise shifting southward from their northern pastures, perhaps along the lower Danube. Some of them possibly crossed the Hellespont and first settled in western Asia Minor, and then afterward crossed the Ægean from Asia into Greece. The others, who remained in Europe, gradually migrated southward on the European side of the Ægean.

Driving their herds before them, with their families in rough carts drawn by horses, the Greek tribesmen probably looked out upon the fair pastures of Thessaly, the snowy summit of Mount Olympus, and the blue waters of the Ægean not long after 2000 B.C. Unable to write, and possessing only the crudest beginnings of civilization, the Greeks thus entered the highly civilized Eastern Mediterranean world. The wandering shepherds, so often invading the Fertile Crescent to find a settled and civilized town life, furnish us the best possible illustration of the situation of the Greeks as they invaded the Ægean

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towns and settlements. As the newcomers looked out across the waters they could dimly discern the islands, where flourishing towns were carrying on busy industries, especially in pottery and metal, which a thriving commerce was distributing about the Mediterranean.

We can imagine the wonder with which these barbarian Greeks must have looked out upon the white sails that flecked the blue surface of the Ægean Sea. It was to be long, however, before these inland shepherds would themselves venture timidly out upon the great waters which they were viewing for the first time. Had the gaze of the Greek nomads been able to penetrate beyond the Ægean isles, they would have seen a vast panorama of great and flourishing oriental states. Here on the borders of the Near Eastern world and under its influences the Greeks were now to go forward toward the development of a civilization higher than any the Near East had yet produced—the highest, indeed, which ancient man ever attained.

Gradually their vanguard pushed southward into the Peloponnesus, and doubtless some of them mingled with the Ægean dwellers in the villages which were grouped under the walls of Tiryns and Mycenæ, just as the Hebrew nomads mingled with the Canaanite townsmen. Some of the Greek leaders may have captured these Ægean fortresses, just as David took Jerusalem; but our knowledge of the situation in Greece at this time is very meager because the peoples who settled here could not yet write, and therefore have left no written documents to tell the story. These first Greeks, who thus entered southern Greece, came to be called Achæans.¹ Following the

¹ The Hittite tablets of Hattusas, however, reveal to us a powerful kingdom on the southern coast of Asia Minor called *Ach-chi-ya-wa* (pronounced Ak-kee-yah'wah), and it is highly probable that we have in this name, written in cuneiform signs, the same name which the Greeks applied to a region of Greece called Achæa. But the people of this earlier, Asiatic Achæa were possibly not Greeks. There are indications that these people of the Asiatic Achæa migrated by sea and settled in southern Greece. Mingling there with the incoming Greek immigrants, these Achæans finally gave their name to the earliest Greek settlers, who are usually called Achæans, and in this manner "Achæa" became the name of a part of Greece.

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Achæans there seems to have been a second wave of Greek nomads (called the Dorians) who reached the Peloponnesus by 1500 B.C. and probably subdued the Achæans as well as the Ægean townsmen, the earlier inhabitants of the region.

The Dorians did not stop at the southern limits of Greece, but, learning a little navigation from their Ægean predecessors, they passed over to Crete, where they must have arrived by 1400 B.C. In the days when the conquering Hittite emperors were breaking up the Egyptian Empire in Syria, and the Hebrews were settling in Palestine, the warlike Dorians were crushing Cretan civilization and the beautiful palaces of the Cretan sea-kings were going up in smoke and flame. For Cnossus, unfortified as it was and without any walled castle, must have fallen an easy prey to the invading Dorians. They took possession of the island, and likewise seized the other southern islands of the Ægean. Between 1300 and 1000 B.C. the Greek tribes conquered the remaining islands, as well as the coast of Asia Minor—the Dorians in the south, the Ionians in the middle, and Æolians in the north. Here a memorable Greek expedition in the twelfth century B.C., after a long siege, captured and burned the prosperous city of Troy, a feat which the Greeks never forgot. During the thousand years between 2000 and 1000 B.C. the Greeks thus took possession not only of the whole Greek peninsula, but likewise of the entire Ægean area.

At the invasion of Crete and the fall of Cnossus, about 1400 B.C., the splendid Ægean civilization, which we saw rising so prosperously, was helpless to defend itself against the invaders. Probably few of the common people of the Ægean towns were able to flee. On the other hand, the noble and well-to-do families forming, all told, considerable numbers must have taken to the sea and fled. Looking back upon burning towns and villas, they must have witnessed also the destruction of the splendid palace of Cnossus, with all its beautiful treasures of Cretan art. For several generations these Cretan wanderers sought new homes along the coasts of the Eastern Mediterranean, and in the thirteenth century B.C. it seems that a group of them settled on the southern coast of Palestine, where we

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know them as the Philistines. There they established a nation and gave their name to the country, for our word "Palestine" is simply another form of the word Philistine.

By 1200 B.C. the displacement of the older populations of the north by the incoming Indo-Europeans was disturbing the entire Eastern Mediterranean world. The whole of Asia Minor had been overrun by another wave of Indo-European migration like that which had once invaded the Highland Zone and conquered the Early Anatolians. These new Indo-Europeans, who came in behind the Greeks, crossed the Hellespont into Asia Minor from Europe. The most important of them were the Phrygians and Armenians. The Hittite Empire, lying directly in their path, was so completely crushed that after 1200 B.C. it entirely disappeared. Many of its communities, following the example of the fleeing Cretans, sought new homes around the Mediterranean.

The Egyptian monuments of this period reveal these seafarers to us very vividly. Besides the Philistines, whom we have already seen fleeing from Crete, the Egyptian inscriptions tell us of the sea-roving Achæans who at this time combined with the other displaced peoples to invade Egypt in the last declining days of the Egyptian Empire. This was apparently a second group of Achæans, who had remained in Asia Minor after the invasion of Greece by their earlier kindred. Forced out by the Indo-European invasion, this second group of Achæans joined with other fleeing Asia Minor people to seek a new home in Egypt. Among these other fugitives were two important peoples whom we shall meet again, the Sardinians and the Etruscans.

We have already seen that the elongation of the Egyptian bronze dagger into a heavier weapon probably took place in the north after the discovery of tin in Bohemia. This longer weapon, a dagger long enough to be called a sword, first appears on the Egyptian monuments in the hands of the Philistines and the Sardinians, who were thus the earliest ancient fighters whom we find armed with the long, two-edged weapon of bronze (Fig. 100). The possession of this longer and heavier weapon made these northerners, especially the Sardinians,



FIG. 100. EGYPTIAN SOLDIERS CHECK THE SOUTHWARD FLIGHT OF THE NORTHERN PEOPLES

This migration is caused by intrusion of Indo-Europeans. The Egyptian soldiers, assisted by Sardinian mercenaries (wearing helmets surmounted by ball decorations; see extreme upper left), are driving back with spear and two-edged sword the Philistines (with feathered headdress) and other northern peoples. These wanderers are actually migrating, as shown by the presence of women and children, who are traveling in two-wheeled carts to which bullocks are hitched in teams of four. The dead and dying of the invaders are scattered over the back-ground and confuse the outlines of the picture

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probably the most dangerous soldiers in the ancient world of the thirteenth century B.C. They were therefore welcomed in Egypt as foreign mercenaries fighting for hire in the Pharaoh's army. While some roving bands of the northerners thus served Egypt, the main body of the "sea-peoples" as the Egyptian monuments call them, kept together for the purpose of invading and conquering Egypt and finding a permanent home there.

Indeed all the great powers of the ancient Near East were threatened by the vast Indo-European movement, which stretched from the Balkan Peninsula eastward to the Upper Euphrates. Its front had set in motion before it a wave of fleeing Ægeans and Asia Minor peoples, who were mostly pre-Indo-European. It was this wave of fleeing northern peoples, and not the Indo-Europeans themselves, who crossed the sea and began to break upon the shores of the eastern and south-eastern Mediterranean, from the Nile Delta to the harbors of Phœnicia, in the thirteenth century B.C.

The onset of these sword-bearing northerners shook the Egyptian Empire to its foundations. The invaders had apparently formed a sort of confederation. Now accompanied by their families in heavy two-wheeled ox-carts some advanced southward by land through Syria, while others came by sea in a great fleet which skirted the Syrian coast. The Syrian city-states were unable to withstand them. As they drew near the Egyptian frontier, Ramses III threw himself with much energy into the preparations for repelling the attack. He dispatched land troops and a fleet of warships northward, and he departed for Syria to lead the campaign himself. Egyptian reliefs (Figs. 100-101) supply details of both the land battle and the naval battle which ensued. The northern host suffered a terrific defeat and was apparently scattered. The inscriptions represent the vanquished northerners as inquiring pitifully of the Egyptian king, "Whither shall we go?"

The Etruscans took to their ships and sailed far westward around the heel of Italy. On the western coast of the Italian peninsula they found new homes, and here they introduced the first civilization into the Western Mediterranean world



FIG. 101. BATTLE BETWEEN A FLEET OF NORTHERN INVADERS AND AN EGYPTIAN FLEET

This scene, sculptured on the wall of an Egyptian temple, is the earliest surviving picture of a naval battle. It represents the defeat of the invading northern Mediterranean peoples by Ramses III not long after 1200 B.C., somewhere along the Syrian coast. Of the nine ships engaged the four with oars and lion's head on prow are Egyptian. The remaining five (goose head on prow) are ships of the invaders. The northerners include Philistines and others. Perhaps this scene explains how the Philistines passed from Crete to Palestine. The invaders carry round shields and spears or two-edged swords, but no bows. The Egyptians, being chiefly archers, were thus able to overwhelm the enemy with their storm of arrows at long range. They then closed in, boarding the enemy ships and taking many prisoners, some of whom may be seen standing bound in the Egyptian ships. For the earliest known grappling irons employed by the Egyptians in this battle see Fig. 153

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The sword-bearing Sardinians likewise sailed westward and took possession of the island which still bears their name. Other maritime allies of the Etruscans and Sardinians, who appear at this time on the Egyptian monuments, are called the *Sikel* people. It is highly probable that they too migrated westward and, settling in the largest of the Western Mediterranean islands, gave it its name of Sicily, probably derived from Sikeli.

Thus the Indo-European invasion of the Eastern Mediterranean world ushered in a new age in human history; for out of that invasion came the westward migration, which resulted in the first chapter of the history of western Europe. This invasion is likewise the introduction to our own history, for it was the development and expansion of western Europe that made America possible. The oriental peoples who thus fled from their homes in Eastern Mediterranean lands, driven out by the incoming Indo-Europeans, carried oriental civilization with them to the Western Mediterranean world. The great westward drift of early Near Eastern civilization, which had finally absorbed the *Eastern* Mediterranean world, had long before been felt in the *Western* Mediterranean, where merchants from the east had for centuries been marketing the products of Near Eastern industries. Now, however, actual colonies of highly civilized peoples from the Eastern Mediterranean were settling in the Western Mediterranean world. This far-westward thrust of ancient oriental civilization, and with it the beginning of civilization in western Europe, were directly due to the invasion of the Indo-European peoples in the Eastern Mediterranean world. We cannot now follow farther the civilized development of early western Europe, for we have still to return to trace the results of Indo-European invasion of the Eastern Mediterranean world.

The Indo-European invaders, including the Greeks, were still in a barbarian stage. Their coming, therefore, broke up the prosperous and civilized communities which we have seen growing up on the north side of the Mediterranean. The collapse of civilization in the *Ægean* area was complete. Some important things in *Ægean* civilization perished entirely--

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among them Cretan writing. Indeed, for a time, writing disappeared from the Ægean area after the Greek invasion.

Such of the Ægean peoples as had not fled before the incoming Greeks now began to mingle with their Greek conquerors, just as we have seen the civilized Canaanites mingling with the invading Hebrew nomads. We remember that the pre-Indo-European population in the Ægean area consisted of the Ægeans, who belonged to the Mediterranean race, Highland Zone peoples from Asia Minor, and probably Achæans also from Asia Minor. It was this mixed Ægean population which now commingled with the incoming Greeks. The result was, of course, a mixed race—the people known to us as the Greeks of history. How much of the Mediterranean and older Asia Minor blood may have flowed in their veins we are now unable to determine; but the supreme genius of the classical Greeks may well have been due in no small measure to this admixture of the blood of the gifted Cretans, with their open-mindedness toward influences from abroad and their fine artistic instincts.

This mixture of blood did result in a similar mixture of speech, just as English is made up of French and Anglo-Saxon. Greek, the language of the victorious invaders, gradually became the language used throughout the Ægean area. At the same time Greek did not blot out every trace of the older language of the region. People continued to call certain towns, rivers, and mountains by the old names they found in use, just as our fathers found Indian geographical names in America, and we have continued to call our greatest river by its Indian name *Mississippi*. The pre-Greek place-names in Greece usually contain the combinations *-nth* (*-nd*) or *-ss* (*-tt*) in their endings—as, for instance, Mount *Parnassus* and *Corinth*. It is thought by some scholars that such names are surviving remnants of the prehistoric occupation of the Ægean area by peoples of Asia Minor, because like names are found also in southwestern Asia Minor. It is interesting to notice that a few probably Ægean words for civilized conveniences, such as the Greek invaders did not possess, were retained. So the word “bathtub” in Greek is really an old Ægean word; for of course

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a race of wandering shepherds, such as the Greeks had been, had no such luxuries, whereas we have recovered the actual bathtubs of the refined Cretans, from whom the Greeks learned the name. Nevertheless the Greek language was already developing as the richest and most beautiful instrument of speech man has ever possessed.

The Nomad Greeks Make the Transition to the Settled Life

As the Greeks commingled with the older population they began to make the transition from their former wandering shepherd life to that of the settled agricultural communities among which they found themselves. They had entered a region which favored such a transition. The Greek peninsula contains about twenty-five thousand square miles.¹ It is everywhere cut up by mountains and inlets of the sea into small plains and peninsulas, separated from each other by either the sea or the mountain ridges. No less than five hundred islands are scattered along its deeply indented eastern shores.

In tranquil summer days one can pass from island to island and cross the entire Ægean Sea from Greece to Asia Minor in a rowboat. This is why a group of shepherd tribes like the Greeks had been able to cross and take possession of the islands of the Ægean and the coast of neighboring Asia Minor. But we must not conclude that at this early stage of their history they had already become a sea-faring people. Centuries later we find the Greek peasant-poet Hesiod (700 B.C.) looking with shrinking eye upon the sea. Long after they had taken possession of the Ægean area the Greeks remained a barbarous people of flocks and herds, with little if any commerce by sea.

If we would understand the situation of the Greeks after their conquest of the civilized Ægeans, we must again recall nomad life as we have seen it along the Fertile Crescent in Asia. We remember that the nomads possessed no organized government, for there was no public business which demanded

¹ About one-sixth smaller than South Carolina—so small that Mount Olympus, on the northern boundary of Greece, is visible over much of the peninsula. From the mountains of Sparta one can see Crete on the one hand and the mountains north of the Corinthian Gulf on the other, separated by a distance of two hundred and twenty-five miles.

it. Even today among such people no taxes are collected, for no one owns any land which can be taxed. There are no public officials, there are no cases at law, no legal business, and men are controlled by a few customs like the "blood revenge." Such was essentially the condition of the nomad Greeks when they began a settled life.

From their old wandering life on the grasslands they carried with them the loose groups of families known as tribes, and within each tribe an indefinite number of smaller groups of more intimate families called brotherhoods. A council of the old men (elders) occasionally decided matters in dispute or questions of tribal importance, and probably once a year, or at some important feast, an "assembly" of all the weapon-bearing men of the tribe might be held, to express its opinion of a proposed war or migration. These are the germs of later European political institutions and even of those in the United States today.¹

It was perhaps after they had found kings over such Ægean cities as Mycenæ that the Greeks, like the Hebrews, began to want kings themselves. Thus the old-time nomad leaders whom they had once followed in war, religion, and the settlement of disputes became rude shepherd kings of the tribes.

Meantime the Greek shepherds slowly began the cultivation of land. This forced them to give up a wandering life to build houses and live in permanent homes. Nomad instincts and nomad customs were not easily rooted out, however. War and the care of flocks continued to be the occupation of the men, as it had been for centuries on the northern grasslands; while the cultivation of the fields was at first left to the women. Furthermore, flocks and herds continued to make up the chief wealth of the Greeks for centuries after they had taken up agriculture.

As each Greek tribe settled down and became a group of villages, the surrounding land was divided among the families by lot, though the tribe as a whole long continued to be the

¹ Compare the House of Lords (= the above council), and the House of Commons (= the above assembly) in England, or, in the United States, the Senate (derived from the Latin word meaning "old man") and the House of Representatives.

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only real owner of the land. Nevertheless, private ownership of land by families gradually resulted. As a consequence there arose disputes about boundaries, about inheritances in land, and much other legal business, which as it increased required more and more attention by those in authority. The settlement of such business tended to create a government. During the four centuries from 1000 to 600 B.C. we see the Greeks struggling with the problem of learning how to transact the business of settled landholding communities and how to adjust the ever-growing friction and strife between the rich and the poor, the social classes created by the holding of land and the settled life.

The lack of writing greatly increased the difficulties to be met by the Greeks as a government developed and its transactions began. There arose in some communities a "rememberer," whose duty it was to notice carefully the terms of a contract, the amount of a loan, or the conditions of a treaty with a neighboring people, that he might remember these and innumerable other things, which in a more civilized society are recorded in writing.

In course of time the group of villages forming the nucleus of a tribe grew together and merged at last into a city. This was the most important process in Greek political development; for the organized city became the only nation which the Greeks ever knew. Each city-state was a sovereign power; each had its own laws, its own army and gods, and each citizen felt a patriotic duty toward his own city and no other. Overlooking the city from the heights in its midst was the king's castle, which we call the "citadel," or "acropolis." Eventually, the houses and the market below were protected by a wall. The king had now become a revered and powerful ruler of the city, and guardian of the worship of the city gods. King and Council sat all day in the market and adjusted the business and the disputes between the people. Though crude, corrupt, and often unjust, these continuous sessions created a state and the first uninterrupted government in Europe.

There were hundreds of such city-states throughout the mainland of Greece and the coasts and islands of the Ægean.

FROM THE NOMAD TO THE SETTLED LIFE

It was while the Greeks were thus living in these little city-kingdoms under kings that Greek civilization arose. While there were Greek kings long before 1000 B.C., it is especially after that date, during the last two and a half centuries of the rule of the kings (1000-750 B.C.), that we are able to follow the rise of Greek civilization.

CHAPTER X

GREEK CIVILIZATION IN THE AGE OF THE KINGS

The Ægean Inheritance and the Spread of Phœnician Commerce

IN ONE very important matter the Greek invaders were more fortunate than their Ægean predecessors. The iron which we have seen spreading in the Near East from the Hittite country had at the same time (thirteenth century B.C.) also begun to reach the Greeks. It was of course a matter of some centuries before iron tools and weapons entirely displaced those of bronze. Indeed, after iron had been in common use among the Greeks for over five hundred years, the Greek poet Æschylus called it the "stranger from across the sea," or "the Chalybean stranger"—the Chalybean region being the iron district of Asia Minor. By 1000 B.C. iron was common in Greece. We may say indeed that the period of Ægean civilization coincided with the Copper Age and the Bronze Age together, while the civilization of the Greeks arose at the incoming of the Iron Age.

Long after 1000 B.C. the life of the Greeks continued to be rude and even barbarous. Memories of the old Ægean splendor lingered in the plain of Argos, and above the Greek village at Mycenæ still towered the massive stone walls of the ancient Ægean princes, who had long before passed away. To these huge walls the Greeks looked up with awe-struck faces, and thought that they had been built by vanished giants called Cyclopes, or with wondering admiration they fingered some surviving piece of rich metal work wrought by the skill of the ancient Ægean craftsmen. The tradition that Crete was the earliest home of their civilization never died out among the Greeks. Without any skill in craftsmanship the Greek shepherds and peasants were slow to take up building, industries, and manufacturing on their own account. Their slowness is also evident in the matter of writing, which, as we have seen, they failed to learn from their Ægean predecessors. For a long time even the dwellings of the Greek kings were usually but simple farmhouses of sun-dried brick, where the swine

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wandered unhindered into the court or slumbered in the sunshine beside the royal doorway. When the Greeks did make a beginning at pottery, the rude paintings with which they decorated this rough ware show that the same methods employed by the Ægean potters in producing their fine ware in Crete a thousand years earlier were still lingering on in a decadent state.

The Greeks were able, however, to buy many beautiful objects of oriental craftsmanship from the Phœnician traders who brought their ships laden with merchandise to Greek shores. Before the longing eyes of the Greek men and women were displayed glass or alabaster perfume bottles from Egypt and rich blue porcelain dishes. If the women did not bid for these, they were quite unable to resist certain handsome ivory combs carved with lions in openwork, and polished till they shone in the sun. Wealthy Greeks were attracted by furniture elaborately inlaid with ivory carvings, and especially by magnificent large, round platters of bronze or even of silver, richly engraved. Splendid purple robes enriched the display of golden jewelry with flashes of brilliant color. Here, too, were the *ketons*,¹ the Phœnician shirtlike garments of woven wool which the Greeks were beginning to wear, and the Greeks called it by the Phœnician name.

The maritime power in the Eastern Mediterranean had thus shifted to the Phœnicians. A Hittite letter, written not long before 1200 B.C. to a grandson of Ramses II, directs the

¹ The later Greek form of *keton* we transliterate *chiton*.

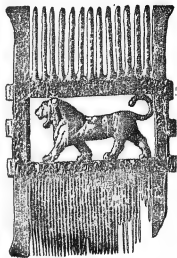


FIG. 102. ANCIENT PHŒNICIAN COMB OF CARVED IVORY

Such wares, manufactured at Sidon and Tyre, were distributed by the Phœnician merchants through the Mediterranean as far west as Spain, where combs like this have been found in ancient graves. The lion adorning this comb is of the form that developed in Syria

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annual Egyptian grain fleet to sail for the southwestern coast of Asia Minor; but a century later the Egyptian fleets had disappeared from these waters in and about the *Ægean*. Only a little earlier a like fate had overtaken the fleets of the



FIG. 103. PHOENICIAN
GARMENT (KETON)
ADOPTED BY THE
GREEKS

The correct costume for the well-dressed Greek in later times consisted of the keton with a cloak above. Much stress was laid on the proper adjustment of clothing, and gentlemen were supposed to be able to arrange the folds with elegant carelessness. The garments of the women may be seen in Fig. 111

Ægeans. In this manner the Eastern Mediterranean was left unoccupied by merchant fleets and by 1000 B.C. the Phœnician cities were taking advantage of this opportunity. Once dwellers in the desert like the Hebrews we remember that the Phœnicians had early occupied the towns along the Syrian coast, where they became clever navigators. The Greek craftsmen were as yet quite unable to produce such wares as the Phœnician merchant offered, and hence these oriental traders did a thriving business wherever they landed.

Nor did the Phœnicians stop with the *Ægean* area. They sought markets also in the West, and they were the discoverers of the westernmost Mediterranean and the Atlantic Ocean. They finally planted settlements even as far away as the Atlantic coast of Spain. Their colony of Carthage became the most important commercial state in the Western Mediterranean and the most dangerous rival of Rome. For some three centuries after 1000 B.C. they were the greatest merchants in the Mediterranean, and their far-reaching traffic was beginning the slow creation of a great mercantile Mediterranean world. They had no armies,

however, and little political organization. The only Phœnician colony that ever became a strong state was Carthage.

The Phœnicians learned the methods of manufacturing their goods, in almost all cases, from Egypt. There they learned

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to make glass and glazed ware, to weave linen and dye it, to cast and hammer and engrave metal. On the other hand, we find the ornamental patterns employed in their art were international. We remember that it was Phœnician workmen whom the Assyrian kings employed to make furniture and metal-



FIG. 104. ANCIENT PHŒNICIAN PLATTER OF ENGRAVED AND BEATEN WORK

This silver platter, now in the Berlin Museum, is of beautiful workmanship. A circular stream of water surrounds a rosette in the middle. On the water are four Nile boats (one of them in the form of a swan), outside of which is a circular border of papyrus flowers. Pieces of such metal work have been found as far west as Spain and as far east as Nineveh, whither they were carried by the Phœnician merchants

work for the royal palace. King Solomon likewise engaged Phœnician workmen to assist in building the Hebrew temple at Jerusalem (1 Kings v). After 1000 B.C. the Phœnicians were the artistic manufacturers in a great world extending from Nineveh on the east to Italy on the west.

On the metal platters and the furniture of carved ivory landed from the Phœnician ships the Greek craftsmen found decorations made up of palm trees, lotus flowers, hunting scenes along the Nile, the Assyrian tree of life, and many

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other picturesque things, but especially those strange winged creatures of oriental fancy, the sphinx, the gryphon, the winged horse. Not only the Greeks, but also the Etruscans in Italy, began to imitate these things in their own work. Thus the whole range of oriental decorative art entered both Eastern and Western Mediterranean civilization, to fill forever after a large place in the decorative art of all civilized peoples of the West, including our own today. At the same time it is highly probable that in the Phœnician workshops in the Ægean islands the Greeks could work side by side with the Phœnician craftsmen and learn how to manufacture many things which were bringing commercial success to the Phœnician merchants.

The Phœnicians Bring the First Alphabet to Europe

But styles of dress, decorative art, and the practical methods of the craftsmen were not the only things which the Phœnician merchants were introducing into Greece. For the Greeks now received from the Phœnicians a priceless gift, far more valuable than all the manufactured wares of the Orient. Indeed it was the most important foreign contribution that ever reached Europe. This new gift was an alphabet. Not later than 1600 B.C. the western Semites near Egypt had devised an alphabet drawn from Egyptian hieroglyphs. The Phœnicians adopted this system of twenty-one alphabetic signs for writing their own language. It contained no signs for syllables, but each sign represented a single consonant. There were no signs for the vowels, which remained unwritten. The western Semites were thus the first to devise a system of writing containing only *alphabetic* signs, that is, true letters. In the twelfth century B.C. the Phœnicians were therefore already giving up the inconvenient Babylonian clay tablet and were importing great quantities of papyrus paper from Egypt.

The Phœnicians arranged their new letters in a convenient order, so that the whole twenty-two might form a fixed list (Fig. 105) easily learned. Such a list could not be learned without giving to each letter a name. They called the first letter of the alphabet *ox*, because the Phœnician word for ox,

THE PHœNICIANS BRING THE ALPHABET

that is, *aleph*, began with the first letter. The second letter of the alphabet they called *house*, because *beth*, the Phœnician word for house, began with the second letter, and so on. This was not unlike our old primers, where our parents learned to say: "A is for 'Axe'; B is for 'Bed';" etc. When the children of the Phœnician merchants learned their letters and were called upon to repeat the alphabet, they therefore began: "*Aleph, beth*," etc., as if our children were to say: "Axe, Bed," etc., instead of "A, B," etc.

The Phœnicians also had a literature, chiefly religious. Their merchants finally kept all their business records in the new and convenient writing on papyrus. Just as the Arameans carried the Phœnician alphabet from the Mediterranean eastward through Asia to

| Semitic-Sinaitic | Canaanite-Phœnician-Aramaic | Greek | Latin |
|------------------|-----------------------------|-------|-------|
| | | A | A |
| | | B | B |
| | | ΓC | CG |
| | | ΔD | D |
| | | ΕE | E |
| | | ϜY | FVUWY |
| | | I | Z |
| | | H | H |
| | | I | IJ |
| | | K | K |
| | | ΛL | L |
| | | M | M |
| | | N | N |
| | | +Ξ | X |
| | | O | O |
| | | ΠΓ | P |
| | | Q | Q |
| | | PR | R |
| | | ΣΣ | S |
| | | T | T |

FIG. 105. ALPHABET OF WESTERN SEMITES AND FORMS DERIVED THEREFROM

(After Professor Martin Sprengling in American Council on Education, *Story of Writing*, Fig. 36)

GREEK CIVILIZATION IN THE AGE OF THE KINGS

India, so now the Phœnicians, and probably also the Etruscans, carried it through the Mediterranean westward to Europe. The Greeks who made purchases from the Phœnician ships often found the Phœnicians handling bits of pale-yellow paper, on which were written bills and lists of merchandise in strange black signs. These the Greeks viewed at first with misgivings, as being mysterious and dangerous symbols. One of their songs of this age speaks of them as "baneful signs." Here and there a Greek merchant, thumbing the Phœnician tradesman's papyrus bills, finally learned the alphabet in which they were written, and slowly began to note down *Greek* words spelled with Phœnician letters.

Here the Greeks early displayed the mental superiority which, as we shall soon discover, they possessed. They noticed that there were no Phœnician letters standing for vowels. They also noticed in the Phœnician alphabet a few letters representing consonants which did not exist in Greek speech. These letters they began to use for the Greek vowels. They thus took the final step in the process of devising a complete system of alphabetic writing. It slowly spread among the Greek states, beginning in Ionia. For a long time it remained only a convenience in business and administration. For centuries the nobles, unable to read or write, continued to regard writing with misgivings. But even the painters of pottery jars had learned to use it by 700 B.C., when we find it on their decorated vases. Shortly after this it was common among all classes. Literature nevertheless long remained an oral matter and was much slower than business to resort to writing.

The Greek children, in learning to read, used for the letters the same names which had been employed in Phœnicia. The Greeks, not knowing what these strange names meant, altered them somewhat; but the Greek children began to pronounce the foreign names of the letters in the fixed order already settled in Phœnicia, saying "Alpha, beta," etc. (instead of "Aleph, beth," etc.). As a child of today is said to be learning his A B C's, so the Greek child learned his Alpha Beta's and thus arose our word "alphabet." The word "alphabet," therefore, containing as it does the two Phœnician words "ox"

GREEK WARRIORS AND THE HERO SONGS

and "house," should remind us of the great debt we owe to the Near East, and especially to the Phœnicians, for the priceless gift of alphabetic writing; for the Phœnician alphabet spread from Greece to Italy and at last throughout Europe. Indeed, every alphabet of the civilized world from India westward has descended from the Phœnician alphabet.

Along with the alphabet, the equipment for using it—that is, pen, ink, and paper—for the first time came into Europe. Paper also brought in with it its oriental names; for the Greeks received from abroad the word *papyros*, designating the Egyptian paper on which they wrote, and we remember that this word has in its English form become "paper." Much of the papyrus used by the Greeks was delivered to them by Phœnician merchants from Byblos. Just as we apply the word "china" to a kind of table ware which first came to us from China, so the Greeks often called papyrus *byblos* after the Phœnician city from which it came. Thus when they began to write books on rolls of such paper they called them *biblia*. It is from this term that we received our word "Bible" (literally "book" or "books"). Hence the English word "Bible," once the name of a Phœnician city, is another living evidence that books and the paper of which they are made originated in the ancient Near East, from which the Greeks received so much.

Greek Warriors and the Hero Songs

The Greek nobles of this age loved war and were devoted to fighting and plundering. It was a frequent sight to see the Greek warrior waving farewell to his family before the pillared porch of his home, as he mounted the waiting chariot and rode forth to battle. The vase-painters have often left us pictures of such warriors. While their protective armor was of bronze, their weapons were at this time commonly of iron, although bronze weapons still lingered on and in their tales of the great wars of the past the Greeks still told how the heroes of older days fought with bronze weapons.

It was only men of some wealth who possessed a fighting outfit like this. They were the leading warriors. The ordinary

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troops, lacking armor, were of little consequence in battle, which consisted of a series of single combats, each between two heroes. Their individual skill, experience, and daring won the battle, rather than the discipline of drilled masses. The victor seized his fallen adversary's armor and weapons; and having fastened the naked body of the vanquished to his chariot, he dragged it triumphantly across the field, only to expose it to be devoured by birds of prey and wild animals. There was thus many a savage struggle to rescue the body of a fallen hero. When a Greek town was captured, its unhappy people were slaughtered or carried away as slaves, and its houses plundered and burned. There was savage joy in such treatment of the vanquished, and such deeds were thought to increase the fame and glory of the victors.

Men delighted to sing of valiant achievements on the field of battle and to tell of the stirring deeds of mighty heroes. In the pastures of Thessaly, where the singer looked up at the cloud-veiled summit of Mount Olympus, the home of the gods, there early grew up a group of such songs telling many a story of the feats of gods and heroes—the earliest literature of the Greeks. Into these songs were woven also vague memories of remote wars which had actually occurred, especially the war in which the Greeks had captured and destroyed the splendid city of Troy. Probably by 1000 B.C. some of these songs had crossed to the coasts and islands of Ionia on the Asiatic side of the Ægean Sea.

Here arose a class of professional bards who graced the feasts of king and noble with songs of battle and adventure recited to the music of the harp. Framed in exalted and ancient forms of speech, and rolling on in stately measures,¹ these heroic songs resounded through many a royal hall—the oldest literature born in Europe. After the separate songs had greatly increased in number, they were finally woven together by the bards into a connected whole—a great epic cycle clustering especially about the traditions of the Greek expedition against Troy. They were not the work of one man, but a

¹ These were in hexameter, that is, six feet to a line. This Greek verse is the oldest literary form in Europe.

EARLY GREEK RELIGION

growth of several centuries; they were sung by generations of singers, some of whom were still living even after 700 B.C. It was then that the songs were first written down.

Among these singers there seems to have been one of great fame whose name was Homer. His reputation was such that the composition of the whole cycle of songs, then much larger than the remnant which has come down to us, was attributed to him. As the Greeks themselves later discerned the impossibility of Homer's authorship of them *all*, they credited him only with the *Iliad*,¹ the story of the Greek expedition against Troy, and the *Odyssey*, the tale of the wanderings of the hero Odysseus on his return from Troy. These are the only two series of songs that have entirely survived, and even the ancient world had its doubts about the Homeric authorship of the *Odyssey*.

These ancient bards not only gave the world its greatest epic in the *Iliad*, but they were, moreover, the earliest Greeks to put into permanent literary form their thoughts regarding the world of gods and men. At that time the Greeks had no other sacred books, and the Homeric songs became the veritable Bible of Greece. They gave to the disunited Greeks a common literature and the inspiring belief that they had once all taken part in a common war against Asia.

The Beginnings and Early Development of Greek Religion

Just as devout Hebrews were taught much about their God by the beautiful tales of Him in the historical narratives of their forefathers, so the wonderful Homeric songs brought vividly before the Greeks the life of the gods. Homer became the religious teacher of the Greeks. To us too he reveals a great chapter in the story of Greek religion; for, like that of the Hebrews, the religion of the Greeks was a slow growth, passing gradually from a low stage to ever higher and nobler beliefs. There was, therefore, a chapter of Greek religion earlier than the Homeric songs. Let us look for a moment at the religion of Greece *before* the Homeric songs.

Like all primitive men, every Greek once thought that the

¹ So named after Ilium, the Greek name of Troy.

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trees and springs, the stones and hilltops, the birds and beasts, were creatures possessed of strange and uncanny powers. He thought there was a spirit in the dark recesses of the earth which made the grain sprout and the trees flourish; in the gloomy depths of the waters also he believed there dwelt a like spirit which swayed the great sea; while still another ruled the far sweep of the overhanging sky. As the Greek peasant, terrified by the jagged lightning and the rolling thunder, or grateful for the gently falling rain, looked up into the misty cloudland of the sky, he often saw the solitary eagle soaring across the vast and lonely expanse. To him the lofty, mysterious bird seemed to be the mighty spirit of the sky, who dwelt there and in his wrath smote the great trees with fire, or in kinder moods sent down the refreshing rain. Thus to *some* Greeks the sky spirit seemed to be an eagle.

Each of these spirits, friendly or hostile, dwelt in a limited region and it was believed possible to gain its favor or avoid its anger by simple gifts, especially food. The earth spirit might be reached by slaying a sheep and letting the blood flow into the earth; while the sky spirit would be won by burning a thigh of the sheep so that its odor might rise to the sky with the soaring smoke. Thus these spirits of the world around the early Greeks became gods and goddesses, and thus arose worship with its sacred customs. There were no temples or houses of worship, and all the simple usages of religion went on out of doors in a grove or in the open air in the court of the house.

We remember that the Hebrews never lost their belief in their great God Yahveh, whom they brought with them into the land of Palestine; and so the Greeks likewise brought into Greece various ideas of the great Sky-god whom they had already worshiped in the old days on the grasslands. He had different names; in one valley they called him "Rain-giver," in another "Thunderbolt." But he was finally known to all as Zeus, which was simply the Greek form of an old word for "sky" in the language of the Indo-European parent people. He became the highest god among all the numerous gods and goddesses revered by the Greeks.

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But Greek religion continued to grow after the Greeks had reached the *Ægean*. Here they found the *Ægeans* worshipping the great earth spirit, the Earth-Mother, or the Great Mother, who made the earth bring forth her grain and fruit as the food of man. From the *Ægeans* the Greeks learned to revere her also. They called her Demeter, and she became one of the great goddesses of Greek religion. The Greeks thus accepted the gods and goddesses whom they found in the *Ægean* islands, just as many of the Hebrews accepted the Canaanite baals whom they found already in Palestine.

The Homeric songs reveal to us a second chapter in Greek religion, when the Greeks were gaining higher ideas about their gods. To be sure, even Homer has here and there an ancient reference which betrays their earlier animal forms, as when he speaks of a goddess as "owl-faced" or even "cow-faced." Likewise the Satyrs, merry spirits of the forest, always had goats' hoofs and horns; while the Centaurs were men with the bodies of horses. But those nature spirits which gained a high place as gods and goddesses appeared in the Homeric songs as entirely human in form and in qualities. Of course they possessed more power than mortals, and they enjoyed the gift of immortality.

In the Homeric songs and in the primitive tales about the gods, which we call myths, the Greeks heard how the gods dwelt in veiled splendor among the clouds on the summit of Mount Olympus. There, in his cloud palace, Zeus the Sky-god, with the lightning in his hand, ruled the other gods like an earthly king. But each of the gods controlled as his own a realm of nature or of the affairs of men. Apollo, the Sun-god, whose beams were golden arrows, was the deadly archer of the gods. But he also shielded the flocks of the shepherds and the fields of the plowmen, and he was a wondrous musician. Above all he knew the future ordained by Zeus and could, when properly consulted, tell anxious inquirers what the future had in store of them. These qualities gave him a larger place in the hearts of all Greeks than Zeus himself, and in actual worship he became the most beloved god of the Greek world.

Athena, the greatest goddess of the Greeks, seems in the

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beginning to have ruled the air and swayed the destroying tempests that swept the Greek lands. Such power made her a warrior goddess, and the Greeks loved to think of her with shining weapons, protecting the Greek cities. But she held out her protecting hand over them also in times of peace, as the potters shaped their jars, the smiths wrought their metal, or the women wove their wool. Athena too had brought them the olive tree, as they believed, and thus she became the wise and gracious protectress of the peaceful life of industry and art. Of all her divine companions she was the wisest in counsel, and an ancient tale told how she had been born in the very brain of her father Zeus, from whose head she sprang forth full-armed. As the divine foster mother of all that was best in Greek life, she was the loveliest of the protecting powers which the quick and sensitive imagination of the Greeks felt everywhere watching over the life and work of men.

At the same time a further group of ancient nature spirits had risen to be great gods, each controlling some special realm. In a brazen palace deep under the waters, Poseidon ruled the sea. The Greeks looked to the earth god, Dionysus, for the fruit of the grapevine, and they rejoiced in the wine which he gave them. An old moon spirit had now become Hermes, the messenger of the gods, with winged feet, doing the bidding of the gods, but he was also the patron of the intercourse of men, and hence the god of trade and commerce. Some of the Greeks, however, in the old days, seeing the moon above the forest margin, had believed it to be a goddess, a divine huntress riding through the forests at night. They called her Artemis. Others, however, had fancied the moon to belong in the sky as the wife of Zeus, whom they called Hera, and she became the protectress of marriage. The Semitic goddess of love, Ishtar, had now passed over from the Syrian cities by way of Cyprus, to become Aphrodite, the Greek goddess of love.

As all these divinities were pictured in human form, it was but natural that they should be thought of as possessing human traits also. Homer describes for us the family quarrels between the august Zeus and his wife Hera, just as such things

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must have occurred in the household life of the Greeks, and certainly in a manner absurdly undignified for such exalted divinities. The Greeks thought of the gods therefore as showing decidedly human defects of character. Such gods were not likely to require anything better in the character of men. Religion was therefore not yet an influence leading to good conduct and right living.

One reason why the Greeks did not yet think that the gods required good conduct of men was their notion of life after death. They believed that all men passed at death into a gloomy kingdom beneath the earth (Hades), where the fate of good men did not differ from that of the wicked. Here ruled Pluto as king, and his wife, the goddess Persephone. As a special favor of the gods, the heroes, men of mighty and god-like deeds, were endowed with immortality and permitted to enjoy a life of endless bliss in the beautiful Elysian Fields, or the Islands of the Blest, somewhere in the Far West, toward the unexplored ocean. The Greeks seem to have brought with them from their earlier wanderings the custom of burning their dead, but they adopted also the Ægean usage of preserving the body as in Egypt and burying it. The primitive notion that the dead must be furnished with food and drink still survived. The tombs of the ancestors thus became sacred places where gifts of food and drink were regularly brought and offered to the dead.

Every household in the little Greek towns felt that the safety of the house was in the hands of Hestia, the goddess of the hearth. But in the Age of the Kings the symbols of the great gods were set up in every house, while in the dwelling of the king there was a special room which served as a kind of shrine for them. There was also an altar in the forecourt, where sacrifices could be offered under the open sky. In so far as the gods had any dwellings at all, we see that they were in the houses of men, and there probably were no temples as yet. Here and there in some communities men were to be found who were thought to possess rare knowledge of the desires of the gods. As these men were more and more often consulted by those who felt ignorant of the proper ceremonies of sacrifice and worship, such men gradually became *priests*.

THE AGE OF THE NOBLES AND GREEK EXPANSION IN THE MEDITERRANEAN

The Disappearance of the Kings and the Rise of the Nobles

THE political development of the Greek world offers a striking contrast to that which we found in the ancient Near East. There, in spite of internecine conflicts, especially in Sumer, the city-states finally united into large and powerful nations, like Egypt or Sumer and Akkad. In Greece, however, the city-states never united into one great nation which included all the Greek people. One reason for this was the character of the land itself. Greece was cut up by mountain ridges and deep bays of the sea, so that the different communities were shut off from one another. Moreover the people on the mainland were separated from their kindred on the Ægean islands and in Asia Minor. Accordingly the various Greek settlements developed not only quite different customs, but also many differences in language.

There were, however, on the mainland of Greece four distinct regions, each forming a pretty clearly outlined geographical section, like the peninsula of Laconia or that of Attica. Each of these sections permitted the union of its city-states into a larger nation. The oldest of these four nations seems to have been Argos. The town of Argos subdued the ancient strongholds of Mycenæ and Tiryns and others in the vicinity, forming the nation of Argos and giving its name to the plain. In the same way the kings of Sparta conquered the two peninsulas on the south of them and finally also the land of the Messenians on the west. The two kingdoms of Argos and Sparta thus held a large part of the Peloponnese.

In the Attic peninsula, likewise, the little city-kingdoms were slowly absorbed by Athens, which at last gained control of the entire peninsula. On the northern borders of Attica the region of Bœotia fell under the leadership of Thebes, but the other Bœotian cities were too strong to be wholly subdued. Bœotia, therefore, did not form a nation but a group of city-states in alliance, with Thebes at the head of the federation. Elsewhere no large and permanent unions were

formed. Sparta and Athens, therefore, led the two most important unions among all the Greeks. Let it be borne in mind that such a nation remained a city-state in spite of its increased territory. The nation occupying the Attic peninsula was called Athens, for it was ruled by the city government at Athens; and every peasant in Attica was called an Athenian.

The governments of the Greek city-states entered upon a new stage of their development when the common people began the struggle to better their lot. As we shall see, this long and bitter conflict finally resulted in giving the people in some Greek states so large a share in governing that the form of the government might be called democracy. This is a word of Greek origin, meaning "the rule of the people," and the Greeks were the first people of the ancient world to gain it.

The cause of the popular unrest in Greece was not only the corrupt rule of the kings but also the oppression of the *nobles*. These powerful men had been able by fraud, unjust seizure of lands, union of families in marriage, and many other influences, to accumulate vast property holdings. Thus there had arisen a class of hereditary nobles—large landholders and men of wealth, called eupatrids. Their fields stretched for some miles around the city and its neighboring villages. In order to be near the king or secure membership in the Council and control the government, these men often left their lands and lived in the city. Such was the power of the eupatrids that the Council finally consisted only of men of this class. Wealthy enough to buy costly weapons, with leisure for continual exercise in the use of arms, these nobles had become the chief protection of the state in time of war. They were also continual marauders on their own account. As they grew more and more accustomed to the sea, they coasted from harbor to harbor, plundering and burning, and returned home laden with rich spoil. Piracy at last became the common calling of the nobles, and a great source of wealth.

Thus grew up a sharp distinction between the city community and the peasants living in the country. The country peasant was obliged to divide the family lands with his brothers. His fields were therefore small, and he was poor. He went

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about clad in a goatskin, and his labors never ceased. Hence he had no leisure to learn the use of arms, nor any way to meet the expense of purchasing them. He and his neighbors were therefore of small account in war. Indeed, he was fortunate if he could struggle on and maintain himself and



FIG. 106. GREEK VASE-PAINTING, SHOWING A SEA FIGHT IN THE DAYS OF THE KINGS

The artist who made this painting inserted his name at the extreme right. It reads "Aristonothos made it." This is not only the earliest signed vase but likewise the earliest signed work of art, crude though it may be, in Europe. It shows us that the Greek artist was gaining increasing pride in his work, and it is one of the earliest indications of individuality in Greek history, about 700 B.C.

family from his scanty fields. Many of his neighbors sank into debt, lost their lands to the noble class, and themselves became day laborers for more fortunate men, or, still worse, sold themselves to discharge their debts and thus became slaves. These day laborers and slaves had no political rights and were not permitted to vote in the Assembly.

If the peasant desired to exert any influence in government, he was obliged to go up to the city and attend the Assembly of the people there. When he did so, he found but few of

his fellows from the countryside gathered there—a dingy group, clad in their rough goatskins. The powerful Council, in beautiful oriental raiment, was backed by the whole class of wealthy nobles, all trained in war and splendid with their glittering weapons. Intimidated by the powerful nobles, the meager Assembly, which had once been a muster of all the weapon-bearing men of the tribe, became a feeble gathering of a few peasants and lesser townsmen, who could gain no greater recognition of their old-time rights than the poor privilege of voting to concur in the actions already decided upon by the king and the Council. The peasant returned to his little farm and was less and less inclined to attend the Assembly at all.

It was, however, not alone the people whose rights the nobles were disregarding; for they began also to consider themselves the equals of the king, whose chief support in war they were. The king could not carry on a war without them or control the state without their help. By 750 B.C. the office of the king was in many states nothing more than a name. While the king was in some cases violently overthrown, in most states the nobles established from among themselves certain elective officers to take charge of matters formerly controlled by the king. Thus in Athens they appointed a noble to be leader in war, while another noble was chosen as *archon*, or ruler, to assist the king in attending to the increasing business of the state. The Athenian king was gradually but peacefully deprived of his powers, until he became nothing more than the leader of the people in religious matters. In Sparta the power of the king was checked by the appointment of a second king, and on this plan Sparta continued to retain her kings. Elsewhere, in the century between 750 and 650 B.C., the kingship quite generally disappeared, although it lingered on in a few states until long after this time. The result of the political and social struggle was the triumph of the nobles, who were henceforth in control in many states. We may again contrast the situation with practices in the ancient Near East. However discontented the common people of an oriental state might become, their discontent never accomplished more than

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the overthrow of one king and the enthronement of another. The *office* of king was never abolished, nor did any other form of government than that of monarchy ever arise in the ancient East.

With the disappearance of the king in the Greek city-state, the royal castle was of course vacated. As it fell into decay, the shrines and holy places which it contained were still protected and revered as religious buildings, and, as we shall see in discussing architecture, they became temples. In this way the castle of the ancient Attic kings on the citadel mount, called the Acropolis of Athens, was followed by the famous temples there.

Greek Expansion in the Age of the Nobles

The Age of the Nobles witnessed another great change in Greek life. Sea-roving and piracy, as we have seen, were common among the nobles. At length, as the Greek merchants gradually took up sea trade, the demand for ships led the Greek mechanics to undertake shipbuilding. They built their new craft on Phœnician models, the only ones with which they were acquainted. When the Phœnician merchants entered the Ægean harbors they now found them more and more occupied by Greek ships. Especially important was the traffic between the Greek cities of the Asiatic coast on the east and Attica and Eubœa on the European side. Among the Asiatic Greeks it was the Ionian cities which led in this commerce. The Ægean waters gradually grew familiar to the Greek communities, until the sea routes became far easier lines of communication than roads through the same number of miles of forest and mountains.

The oppressive rule of the nobles, with the resulting impoverishment of the peasants, was an important influence, leading the Greek farmers to seek new homes and new lands beyond the Ægean basin. Greek merchants were not only trafficking with the northern Ægean, but their vessels had penetrated the great northern sea, which they called the Pontus, known to us as the Black Sea. Their trading stations among the descendants of the Stone Age peoples in these

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distant regions offered to the discontented farmers of Greece plenty of land with which to begin life over again. Before 600 B.C. they girdled the Black Sea with their towns and settlements, reaching the broad grainfields along the lower Danube and the iron mines of the old Hittite country on the southeastern coast of the Black Sea. But no such development of Greek genius took place in this harsher climate of the north as we shall find in the *Ægean*. Not a single great artist or writer ever came from the North. Although the Pontus became the granary of Greece, it never contributed anything to the higher life of the Greeks.

In the east, along the southern coasts of Asia Minor, Greek expansion was stopped by the Assyrian Sennacherib when he defeated a body of Greeks in Cilicia about 700 B.C. in the earliest collision between the Greeks and a great power of the oriental world. The Greek settlements in Cyprus, revealed to us by the Hittite letters as far back as the thirteenth century B.C., long remained the easternmost outposts of the Greek world. In the south they found a friendly reception in Egypt, and there in the Nile Delta they were permitted to establish a trading city at Naucratis ("Mistress of Ships"), the predecessor of Alexandria. West of the Delta they eventually founded Cyrene.

It was the unknown West, however, which became the America of the early Greek colonists. Many a Columbus pushed his ship into this strange region of mysterious dangers on the distant borders of the world, where the heroes were believed to live in the Islands of the Blest. Looking westward from the western coast of Greece, the seamen could discover the shores of the heel of Italy, only fifty miles distant. When they had once crossed to it, they coasted around Sicily and far into the west. Here was a new world. Although the Phœnicians were already there, its discovery was as momentous for the Greeks as that of America for later Europe.

By 750 B.C. their colonies appeared in this new western world, and within a century they fringed southern Italy from the heel to a point well above the instep north of Naples, where they were stopped by the settlements of the Etruscans.

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This region of the Greek colonies of southern Italy came to be known as Great Greece. Here the Greek colonists looked northward to the large group of Etruscan cities stretching up to the river Arnus, but they probably gave little heed to the hills in the foreground, crowned by the rude settlements which were destined to become Rome. They little dreamed that this insignificant town would yet rule the world, making even the proud cities of their homeland its vassals.

The Greek colonists crossed over also to Sicily and drove out the Phœnician trading posts there, except at the western end of the island, where the Phœnicians held their own. These Greek colonists in the West shared in the higher life of the homeland; and Syracuse, at the southeast corner of the island of Sicily, became at one time the most cultivated, as well as the most powerful, city of the Greek world. At Massilia (Marseilles), on the coast of later France, the western Greeks founded a town which controlled the trade up the Rhone Valley; and attracted by the silver-mines of Tartessus, they reached over even to the Mediterranean coasts of Spain.

Thus, under the rule of the nobles, the Greeks expanded till they stretched from the Black Sea along the north shore of the Mediterranean almost to the Atlantic. In this imposing movement we recognize a part of the far outstretched western wing of the Indo-European line; but at the same time we remember that in the Phœnician empire of Carthage, the Semite had likewise flung out his western wing along the *southern* Mediterranean, facing the Indo-European peoples on the *north*.

This wide expansion of Greeks and Phœnicians tended at last to produce a great Mediterranean world. Was the leading civilization in that Mediterranean world to be Greek, springing from the Greeks and their colonies, or was it to be oriental, carried by the Phœnician and Etruscan galleys and spread especially by the far-reaching settlements of the Phœnicians? That was the great question, and its answer was to depend on how Greek civilization succeeded in its growth and development at home in the Ægean, to which we must now turn.

GREEK EXPANSION

Greek Civilization in the Age of the Nobles

We have already noticed the tendencies which kept the Greek states apart and prevented their union as a single nation. There were now, on the other hand, influences which tended toward unity. Among such influences were the contests in arms and the athletic games, which arose from the early custom of honoring the burial of a hero with such celebrations. In spite of the local rivalries at these contests, a sentiment of unity was greatly encouraged by the celebration and common management of the games. They finally came to be held at stated seasons in honor of the gods. As early as 776 B.C. such contests were celebrated as public festivals at Olympia.¹ Repeated every four years, they finally aroused the interest and participation of all Greece.

Religion also became a strong influence toward unity, because there were some gods at whose temples all the Greeks worshiped. The different city-states therefore formed several religious councils, made up of representatives from the various Greek cities concerned. They came together at stated periods, and in this way each city had a voice in the joint management of the temples. These councils were among the nearest approaches to representative government ever devised in the ancient world. The most notable of them were the council for the control of the Olympic games, for the famous sanctuary of Apollo at Delphi, and for the great annual feast of Apollo in the island of Delos.

These representatives spoke various Greek dialects at their meetings. They could understand each other, however, just as in our own land a citizen from Maine understands another from Louisiana, though they may laugh at each other's oddities of speech. Their common language thus helped to bind together the people of the many different Greek cities. A sentiment of unity also arose under the influence of the Homeric songs, with which every Greek was familiar—a common inheri-

¹ It has been hoped that the Olympic games which have been revived in modern times as an international project would help to draw the nations of the world closer together and promote good will and understanding among them.

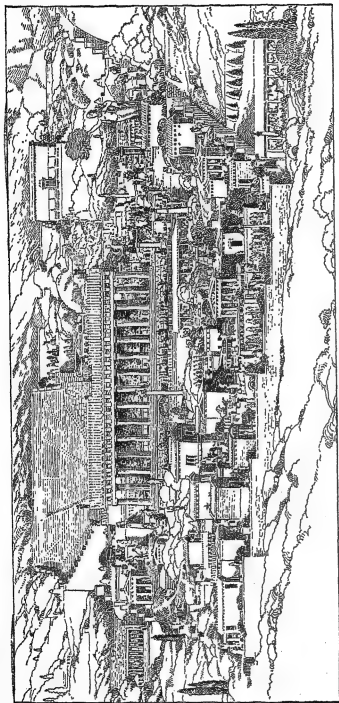


FIG. 107. THE BUILDINGS OF DELPHI RESTORED

Beginning with the seventh century B.C. this place became a national sanctuary of the Greeks, where all Greece and many foreigners came to hear the oracles of the revered Apollo. His temple, many times rebuilt, was a Doric structure which we see rising in the middle of the inclosure. A zigzag way passed up from the lower right-hand corner of this inclosure, and on each side of this way were ranged the treasures containing the votive offerings of the Greeks to the great god—the statues and victorious trophies, many of them of gold and silver, presented by states, kings, and individuals. Universal reverence for this famous sanctuary failed to protect it, for it was finally plundered by the Romans. (Excavated by a French expedition and restored after Homolle-Tournaire)

GREEK EXPANSION

tance depicting all the Greeks united against the Asiatic city of Troy.

Thus bound together by ties of custom, religion, language, and common traditions, the Greeks gained a feeling of race unity, which set them apart from other races. They called all men not of Greek blood "barbarians," which was not originally a term of reproach for the non-Greeks. Then the Greek sense of unity found expression in the first all-inclusive term for *themselves*. They gradually came to call themselves Hellenes, and found pleasure in the belief that they had all descended from a common ancestor called Hellen. But it should be clearly understood that this new designation did not represent a Greek *nation* or state, but only the group of Greek-speaking peoples or states, often at war with one another.

The lack of political unity evident in such wars was also very noticeable in trade relations. No merchant of one city had any legal rights in another city where he was not a citizen. Even his life was not safe, for no city made any laws protecting the stranger. He could secure protection only by appealing to the old nomad custom of "hospitality," after he had been received by a friendly citizen as a guest. For the reception of any stranger who might have no such friend to be his host, a city might appoint a citizen to act as its official host. There is in the British Museum, for instance, a bronze tablet bearing a Greek inscription which certifies to the appointment of an official host (*proxenos*) at Athens for the city of Corcyra (modern Corfu). This man Dionysios was supposed to give hospitality and assistance to citizens of Corcyra when they were in Athens. He was expected, furthermore, to receive any ambassadors sent to Athens from Corcyra and to give some attention to the commercial interests of Corcyra in Athens. In return he was granted the right to possess land and house property in Corcyra. The Greek *proxenos* thus corresponded somewhat to the *consul* of modern nations. These arrangements are a revelation of the strong *local* prejudice of each Greek city. The most fatal defect in Greek character was the inability of the various states to

THE AGE OF THE NOBLES

forget their local differences and jealousies and to unite into a common federation or great nation including all Greeks.¹

In spite of oriental luxuries, like gaudy clothing and wavy oriental wigs, Greek life in the Age of the Nobles was still rude and simple. The Greek cities of which we have been talking were groups of dingy sun-dried brick houses, with narrow wandering streets which we would call alleys. On the height where the palace or castle of the king had once stood temples were being erected. The first Greek temples were probably rectangular in shape, and all had a "peaked" roof with a triangular gable at each end. Many of these buildings had a porch with a row of wooden posts. The temple of Hera at Olympia is probably the oldest temple in Greece. A study of its ruins casts some light on the change from wood and brick to stone as the building material; for the remains of the stone columns which surrounded the outside of the temple are of different sizes and proportions, as though they were inserted at different times to replace the old wooden ones with which the temple was first built. The walls were of sun-dried brick, with some wooden timbers, and have therefore decayed and disappeared. As for sculpture in this age, the figure of a god consisted merely of a wooden post with a rough-hewn head at the top. When draped with a garment it could be made to serve its purpose.

While there were still very few who could read, there was here and there a man who owned and read a written copy of Homer. Men told their children quaint fables, representing the animals acting like human creatures, and by means of these tales with a moral made it clear what a man ought or ought not to do. The Greeks were beginning to think about human conduct. The old Greek word for virtue no longer meant merely valor in war, but also kindly and unselfish conduct toward others. Duty towards a man's own country was now beginning to be felt in the sentiment we call patriotism.

¹ We may recall here how slow were the thirteen colonies of America to suppress local pride sufficiently to adopt a constitution uniting all thirteen into a nation. It was local differences similar to those among the Greeks which afterward caused the American Civil War.

GREEK EXPANSION

Right conduct, as it seemed to some, was even required by the gods, and it was finally no longer respectable for the nobles to practice piracy.

Under these circumstances it was natural that a new literature should arise, as the Greeks began to discuss *themselves* and *their own* conduct. The old Homeric singers never referred to themselves; they never spoke of *their own* lives. They were absorbed in describing the valiant deeds of their

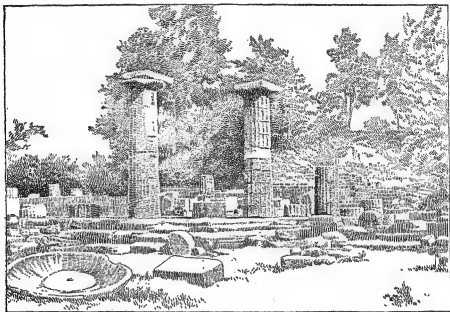


FIG. 108. THE RUINS OF THE TEMPLE OF HERA AT OLYMPIA

heroes who had died long before. The heroic world of glorious achievement, in which these early singers found their inspiration, had passed away, and eventually their art died also. Meanwhile the problems of the *present* began to press hard upon the minds of men; the peasant farmer's distressing struggle for existence made men conscious of very present needs. Their *own* lives became a great and living theme.

The voices that once chanted the hero songs therefore died away, and now men heard the first voice raised in Europe on behalf of the poor and the humble (750-700 B.C.). Hesiod, an obscure farmer under the shadow of Mount Helicon in Bœotia, sang of the dreary and hopeless life of the peasant—

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of his *own* life as he struggled on under a burden too heavy for his shoulders. We even hear how his brother Persis seized the lands left by their father, and then bribed the judges to confirm him in their possession.

This earliest European protest against the tyrannies of wealthy town life was raised at the very moment when across the corner of the Mediterranean the once nomad Hebrews were passing through the same experience. The voice of Hesiod raising the cry for social justice in Greece sounds like an echo from Palestine. But we should notice that in Palestine the cry for social justice resulted finally in a *religion* of brotherly kindness, whereas in Greece it resulted in a *form of government*, that is, democratic *institutions*, the rule of the people, who refused longer to submit to the oppressions of the few and powerful. In the next chapter we shall watch the progress of the struggle by which the rule of the people came about.

CHAPTER XII

THE INDUSTRIAL REVOLUTION AND THE AGE OF THE TYRANTS

The Industrial and Commercial Revolution

THE remarkable colonial expansion of the Greeks, together with the growth of industries in the home cities, led to profound changes. The new colonies not only had needs of their own, but they also had dealings with the inland, which finally opened up extensive regions of Europe as a market for Greek wares. The home cities at once began to meet this demand for goods of all sorts. The Ionian cities led the way as formerly; but the islands also, and finally the Greek mainland—especially Corinth, Eubœa, and Ægina—began to share in the growing Greek trade. Ere long the commercial fleets of the Hellenes were threading their way along all the coasts of the northern, western, and southeastern Mediterranean, bearing to distant communities Greek metal work, woven goods, and pottery. They brought back either raw materials and foodstuffs, such as grain, fish, and amber, or finished products like the magnificent utensils in bronze from the cities of the Etruscans in northern Italy. At the yearly feast and market on the island of Delos the Greek householder found the Etruscan bronzes of the West side by side with the gay carpets of the Orient.

To satisfy the increasing demands of trade, and to meet Phœnician competition, the Greek craftsmen greatly improved their work. During the seventh century Greek industries were still unequal to those of the Orient, but after 600 B.C. the Greeks began to surpass their oriental teachers. In Samos they learned to make *hollow* bronze castings, like those of the Egyptians. They painted pottery with *their own* decorative scenes, taken from the lives of gods and men, and these more and more displaced the rows of oriental figures, half animal, half human. Thus in industry Greece began to emancipate herself from the Orient.

At the same time, growing trade obliged every Greek craftsman to enlarge his small shop—once, perhaps, only large enough to supply the wants of a single estate. Unable to find

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the necessary workmen, the proprietor who had the means bought slaves, trained them to the work, and thus made his little stall into a factory with a score of hands. Henceforth industrial slave labor became an important part of Greek life.

Athens entered the field of industry much later than the Ionian cities. About the middle of the sixth century, however, Athens began to develop one very important industry, the manufacture of pottery. In time this industry grew to such an extent that by examining the signed Attic vases which have been found, we may trace the rise and spread of Athenian commerce from the earliest beginnings until Athens became the commercial leader of the Greek cities. It is interesting to note that eventually the Athenian potters required an extensive quarter of the town to accommodate their workshops. It is not a little impressive to see the modern excavator opening tombs far toward the interior of Asia Minor and taking out vases bearing the signature of the same Athenian vase-painter whose name we may also read on vases dug out of the Nile Delta in northern Africa, or taken from tombs in the cemeteries of the Etruscan cities of Italy. We suddenly gain a picture of the Athenian manufacturer in touch with a vast commercial domain extending across the ancient world.

Soon the shipbuilder, responding to the growing commerce, began to build craft far larger than the old fifty-oar galleys. The new merchantmen were driven only by sails, an Egyptian invention of ages before. They were so large that they could no longer be drawn up on the strand as before. Hence sheltered harbors were necessary, and for the same reason the anchor was now invented. The protection of such merchant ships demanded more effective warships, and the distinction arose between a man-o'-war, or battleship, and a merchantman. Corinth boasted the production of the first decked warships—a great improvement, giving the warriors above more room and better footing, and protecting the oarsmen below, for warships must be independent of the wind, and hence they were still propelled by oars. The oarsmen were now arranged in three rows, each man wielding an oar, and thus the power of an old "fifty-oar" could be multiplied by three without

THE INDUSTRIAL REVOLUTION

much increasing the size of the craft. These innovations were all in common use by 500 B.C. With superior equipment on the sea, and the marked improvement of their industries, the Hellenes were soon beating the Phœnicians in the Mediterranean markets.

Meantime Greek business was greatly simplified by the introduction of coined money. From the peoples of inner Asia Minor the Ionians had learned to use the precious metals by weight in making business payments after the oriental manner. The basis of weight was the Babylonian *mina*. Sixty such minas (pounds) made a talent, and a talent of silver was worth about \$1125. Not long after 700 B.C., the kings of Lydia in Asia Minor began to cut up silver into lumps of a fixed weight, small enough to be of convenient size and value. These they stamped with some symbol of the king or state to show that the state guaranteed their value, and such pieces formed the earliest known coins.

The Ionian cities soon took over this great convenience, and it quickly passed thence to the islands and the European Greeks. The Athenians divided the mina of silver into a hundred parts. A lump of silver weighing the hundredth part of a mina was worth from eighteen to twenty cents. This became the ordinary small unit of value, and it still survives as such for large sections of Europe in the French *franc*, Italian *lira*, and Austrian *Krone*, all worth somewhat less than twenty cents until the World War affected their value unfavorably. The Athenians called this coin a *drachma*, meaning a "handful," because it was equal in value to a handful of small change consisting of little rods of iron or copper used by the common people, like our copper cents. The American dollar was originally five of these drachmas, and the Athenians themselves issued a four-drachma piece (*tetradrachma*) which served as their dollar. The purchasing power of a drachma was in ancient times very much greater than in our day. For example, a sheep cost one drachma, an ox five drachmas, and a landowner with an income of five hundred drachmas (\$100) a year was considered a wealthy man.

Greek wealth had formerly consisted of lands and flocks,

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but now men began to accumulate capital in *money*. Loans were made and the use of interest came in from the Near East. Interest was high, sometimes even 18 per cent yearly.



FIG. 109. SPECIMENS ILLUSTRATING THE BEGINNING OF COINAGE

These are rough lumps of silver, flattened by the pressure of the stamp. Coins 1 and 2 are marked by the bench tool which held the lump while the stamp was struck upon it. This defect was slowly overcome, and the coins became round as the stamp itself was made round instead of square. 1, both sides of a Lydian coin (about 550 B.C.); 2, both sides of a coin of the Greek island of Chios (500 B.C.), showing how the Greeks followed the Lydian model (2); 3, both sides of a four-drachma piece of Athens (sixth century B.C.), bearing head of Athena on obverse, and on reverse an owl. The Athenian coins were, therefore, called "owls." As the silver was obtained from the state mine at Laurium, it is to these coins that Aristophanes (p. 395) refers when he speaks in his play *Birds* of the owls of Laurium nesting in the purses of the Athenians and hatching small change

Men who could never have hoped for wealth as farmers were now growing rich. For the developing industries and the commercial ventures on the seas rapidly created fortunes among a class before obscure. There arose thus a prosperous industrial and commercial *middle class* who demanded a voice in the government. They soon became a political power of much influence, and the noble class were obliged to consider them. Thus as far back as the sixth century B.C., it was quite generally said that "money makes the man."

The prosperity we have sketched was still insufficient to produce large cities as we now have them. Athens and Corinth probably had about 25,000 inhabitants each. In spite of commercial prosperity the Greeks were still dependent on agriculture as their

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greatest source of income. But here again the farms and estates were from our point of view very small. The largest farms contained not over a hundred acres, while a man who had fifty acres was classed among the rich.

Rise of the Democracy and the Age of the Tyrants

While the prosperous capitalistic class was thus arising, the condition of the peasant on his lands grew steadily worse. His fields were dotted with stones, each the sign of a mortgage, which the Greeks were accustomed to indicate in this way. The wealthy creditors were foreclosing these mortgages and taking the lands, and the unhappy owners were being sold into foreign slavery or were fleeing abroad to escape such bonds. The nobles in control did nothing as a class to improve the situation; on the contrary, they did all in their power to take advantage of the helplessness of the peasants and small farmers.

But new enemies now opposed the noble class. In the first place, the new men of fortune were bitterly hostile to the nobles; in the second place, the improvement in Greek industries had so cheapened all work in metal that it was possible for the ordinary man to purchase weapons and a suit of armor. Moreover, the development of tactics under the leadership of the Spartans had produced close masses of spearmen, such as we have already found in ancient Babylonia, each mass (phalanx) standing like an unbroken wall throughout the battle. The war chariot of the individual hero of ancient times could not penetrate such a battle line. The chariot disappeared and was seen only in chariot races. These changes increased the importance of the ordinary citizen in the army and therefore greatly increased the power of the lower classes in the state.

At the same time the nobles were far from united. Serious feuds between the various noble families frequently divided them into hostile factions. The leader of such a faction among the nobles often placed himself at the head of the dissatisfied people in real or feigned sympathy with their cause. Both the peasants and the new commercial class of citizens would

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rally around this leader. Thus supported, he was able to overcome and expel his rivals among the noble class and to gain undisputed control of the state. In this way he became the ruler.

Such a ruler was in reality a king, but the new king differed from the kings of old in that he had no royal ancestors and had seized the control of the state by violence. The people did not reverence him as of ancient royal lineage, and while they may have felt gratitude to him, they felt no loyalty. His position always remained insecure. The Greeks called such a man a "tyrant," which was not at that time a term of reproach, as it is with us. The word "tryanny" was merely a term for the high office held by this ruler. Nevertheless, the instinctive feeling of the Greeks was that they were no longer free under such a prince, and the slayer of a tyrant was regarded as a hero and a savior of the people.

By 650 B.C. such rulers had begun to appear, but it was especially the sixth century (from 600 to 500 B.C.) which we may call the Age of the Tyrants. They arose chiefly in the Ionian cities of Asia Minor and the islands; also Eubœa, Athens, Corinth, and the colonies of Sicily—that is, in all the progressive Greek city-states where the people had gained power by commercial prosperity. Their rise was one of the direct consequences of the growing power of the people, and in spite of public opinion about them, they were the first champions of democracy. Such men as Periander of Corinth and Pisistratus of Athens looked after the rights of the people, curbed the nobles, gave great attention to public works like harbor improvements, state buildings, and temples, and cultivated art, music, and literature.

Hitherto all law, so long ago reduced to writing in the Near East, had been a matter of oral tradition in Greece. It was very easy for a judge to twist oral law to favor the man who gave him the largest present. The people were now demanding that the inherited oral laws be put into writing. After a long struggle the Athenians secured such a written code, arranged by a man named Draco, about 624 B.C. It was

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an exceedingly severe code; hence our adjectives "Draconian" and "Draconic," meaning "harsh."

Meantime the situation in Athens was much complicated by hostilities with neighboring powers. The merchants of

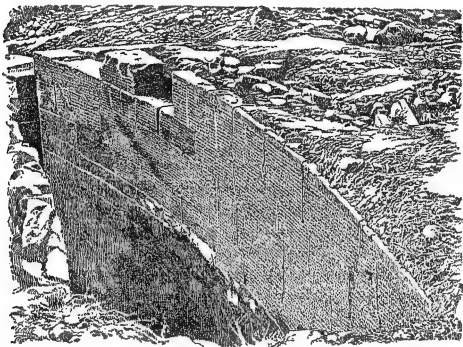


FIG. 110. RUINS OF THE ANCIENT COURTHOUSE OF GORTYNA, IN CRETE, AND THE EARLY GREEK CODE OF LAWS ENGRAVED ON ITS WALLS

This hall, dating from the sixth century B.C., was a circular building about 140 feet across, which served as a courthouse. If any citizen thought himself unjustly treated, he could appeal to the great code engraved in twelve columns on the inside of the stone wall of the building. It covers the curved surface of the wall for about 30 feet, but extends only as high as would permit it to be read easily. It forms the longest Greek inscription now surviving. This code shows a growing sense of justice toward a debtor and forbids a creditor to seize a debtor's tools or furniture for debt

Megara had seized the island of Salamis, overlooking the port of Athens. The loss of Salamis and the failure of the nobles to recover it aroused intense indignation among the Athenians. Then a man of the old family to which the ancient kings of Athens had belonged, a noble named Solon, who had gained wealth by many a commercial venture on the seas, roused his countrymen by fiery verses, calling upon the Athenians

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not to endure the shame of such a loss. Salamis was recovered, and Solon gained great popularity with all classes of Athenians.

The result was Solon's election as archon in 594 B.C. He was given full power to improve the evil condition of the peasants. He declared void all mortgages on land and all claims of creditors which endangered the liberty of a citizen. But Solon was a true statesman, and to the demands of the lower classes for a new apportionment of lands held by the nobles he would not yield. He did, however, set a limit to the amount of land which a noble might hold. All men who had been enslaved for debt were given their freedom. It was, moreover, made unlawful to accept the body of a man as security for his indebtedness.

Solon also made a law that anyone who had lost a lawsuit could appeal the case to a jury of citizens. Such improvements in the laws greatly increased a citizen's chance of securing justice. Solon's laws were all written, and they formed the first Greek code of laws by which all free men were given equal rights in the courts. Some of these laws have descended to our own time and are still in force.

Furthermore, Solon proclaimed a new constitution which gave to all a voice in the control of the state. It recognized four classes of citizens, graded according to the amount of their income. The wealthy nobles were the only ones who could hold the highest offices, and the peasants were permitted to hold only the lower offices. Although the government remained in the hands of the nobles, the humblest free citizen could now be assured of the right to vote in the Assembly of the people. As a guide in the proceedings of the Assembly there was created a Council of four hundred members. This new Council existed along with the old Council of Elders, called the Areopagus, which now apparently exercised some sort of advisory powers and devoted itself primarily to maintaining and enforcing the laws.

Solon is the first great Greek statesman of whom we obtain an authentic picture, chiefly through his surviving poems. The leading trait of his character was moderation, combined

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with unfailing decision. When all expected that he would make himself tyrant he laid down his expiring archonship without a moment's hesitation and left Athens for several years, to give the new constitution a fair chance to work.

Solon saved Attica from a great social catastrophe, and it was largely due to his wise reforms that Athens achieved her industrial and commercial triumphs. But his constitution gave the prosperous commercial class no right to hold the leading offices of government. They continued the struggle for power. Hence Solon's work, though it deferred the humiliation, could not save the Athenian state from subjection to a tyrant.

Returning from exile, backed by an army of hired soldiers, Pisistratus (540-528 B.C.), a member of one of the powerful noble families, finally held control of the Athenian state. He ruled with great sagacity and success, and many of the Athenians gave him sincere support. Having built a small war fleet, he seized Sigeum, a city at the mouth of the Hellespont (Dardanelles). Thus it was Pisistratus who first showed the Athenians the wisdom of securing the control of the gateway to the Black Sea, which control was finally won by Cimon after the Persian Wars (p. 327). Pisistratus carried out many public improvements at Athens, and transferred to the city the old peasant spring feast of Dionysus, from which were later to come the theater and the wonderful dramas of Athens. Athenian manufactures and commerce flourished as never before, and when Pisistratus died he had laid a foundation to which much of the later greatness of Athens was due.

In spite of their ability, the sons of Pisistratus, Hipparchus and Hippias, were unable to overcome the prejudice of the people against a ruler on whom they had not conferred authority. One of the earliest exhibitions of Greek patriotism is the outburst of enthusiasm at Athens when two youths, Harmodius and Aristogiton, at the sacrifice of their own lives, struck down one of the tyrants (Hipparchus). Hippias was eventually obliged to flee. Thus, shortly before 500 B.C., Athens was freed from her tyrants.

The people were now able to gain new power against the nobles by the efforts of Clisthenes, a noble friendly to the

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lower classes. He broke up the old tribal divisions which had been formed on the basis of blood relationship, and established ten tribes on purely *local* lines of division. He thus cut up the old noble clans and assigned the fragments to different local divisions, where they were in the minority. This prevented the nobles from acting together and helped to break their power.

Clisthenes next turned his attention to the Council of Four Hundred, which was altered on the basis of the ten tribes into a Council of Five Hundred. This was divided into ten groups of fifty each, and each group served a little over a month each year. As no citizen could hold office more than twice in his lifetime, the result was that a great number of Athenians must have served on the Council at least once. In later times this council played a most important part in the government of Athens; therefore, since so many citizens were at one time or another members, it had a great influence on the democratization of the Athenian state.

In order to avoid the rise of a new tyrant, Clisthenes established a law that once a year the people might by vote declare any prominent citizen dangerous to the state and banish him for ten years. To cast his vote against a man, a citizen had only to pick up one of the pieces of broken pottery lying about the market place, write upon it the name of the citizen to be banished, and deposit it in the voting urn. Such a bit of pottery was called an *ostrakon*. Hence to ostracize a man (literally to "potsherd" him) meant to interrupt his political career by banishment. By these and other means Athens had gained a form of government which gave the people considerable power. The state was thus in large measure a democracy.

Meantime Sparta also had greatly increased in power. The Spartans had pushed their military successes until they held over a third of the Peloponnesian peninsula. The result was that long before 500 B.C. the Spartans had forced the neighboring states into a combination, the Spartan league, which included nearly the whole of the Peloponnesus.

The Spartans did no farming and did not occupy themselves with the crafts. They had reduced the peoples in their

THE NEW WORLD OF CULTURE

immediate vicinity to the condition of serfs, and these serfs tilled the soil and manufactured the few iron implements needed. Wealth was measured in terms of land and serfs. As the serfs greatly outnumbered the Spartan landholding aristocracy, the latter lived in constant fear of a serf uprising. This fear colored the whole life of the Spartans. The tyrants were leaders of the people, and thus favored the liberation of all serfs. Sparta therefore feared both tyrants and democracies. Some of the states of the Spartan League seem to have been attracted to join it by Spartan assistance in putting down tyranny. Other states entered the Spartan League to secure the military protection of Sparta, for the Spartan fear of a serf uprising had turned their city into an armed camp and the Spartans had become the greatest soldiers of Greece. The army of the Spartan League consequently enjoyed a prestige which permitted Sparta to impose her will on the Greek states many times during the next century.

Civilization of the Age of the Tyrants

Although the nobles of Athens had been forced to yield much of their political power, nevertheless they still held the exclusive right to be elected to the important offices in the government. They continued also to be the leaders in all those matters which we call *social*. They created the social life of the time, and they were the prominent figures on all public occasions. The multitudes which thronged to the public games looked down at the best-born youths of Greece contesting for the prizes in the athletic matches, and the wealthier nobles put the swiftest horses into the chariot races. To the laurel wreath which was granted the winner at the Olympian games Athens added a prize of five hundred drachmas when the winner was an Athenian. He was also entitled to take his meals at tables maintained by the state. Not seldom the greatest poets of the time, especially Pindar, celebrated the victors in triumphant verses.

In the matter of education, noble youths might be found spending the larger part of the day practicing in the public inclosure devoted to athletic exercises. To be sure, writing

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was now so common that a young man could not afford to be without it, and hence he submitted to some instruction in this art—a discipline which he was probably very reluctant to exchange for the applause of the idlers gathered around the gymnastic training-ground. The women of Athens had no share in either the education or the social life of the men. The policy of subordinating women was not, however, characteristic of all Greeks. It seems to have been exclusively an attitude adopted by the Ionian Greek, and particularly observable after the seventh century B.C.



FIG. 111. GREEK VASE-PAINTING, SHOWING THE HOME LIFE OF WOMEN

A maidservant at the right presents to her mistress an Egyptian alabaster perfume bottle. The mistress sits arranging her hair before a hand mirror. At the left a lady is working at an embroidery frame, while a visitor in street costume watches her work. Behind stands a lady with a basket. Notice the grace and beauty of the figures, which at this time were in red (the natural color of the terra cotta), showing against a shining black

The education of the time was not complete without some instruction also in music. It was in the Age of the Tyrants that the music of Greece rose to the level of a real art. A system of writing musical notes, meaning for music what the alphabet meant for literature, now appeared in Greece. The flute had been brought from Egypt to Crete in early times, and from the Cretans the Greeks had received it. Long a favorite instrument, it was now much more cultivated, and one musician even wrote a composition for the flute which was intended to tell the story of Apollo's fight with the dragon of Delphi. The lyre, which formerly had but four strings, was now made with seven, and compositions for the lyre alone were popular. Either of these instruments might be played as

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the accompaniment of song, or both together, with choruses of boys and girls. Here we have the beginnings of orchestral music as the accompaniment of choruses.

The songs for choruses, together with certain personal and emotional poems, which were usually presented as solos, form what we call Greek lyric poetry. These poems expressed momentary moods, longings, dreams, hopes, and fiery storms of passion. Each poet found a wondrous world within *himself*, which he thus pictured in short songs. As every Greek lyric poem was composed to be sung to music, it was necessary that all Greek lyric poets should also be musicians. Probably the greatest of these poets was Pindar of Thebes. Proud of his noble birth, the friend and intimate of tyrants and nobles, but also their fearless admonisher, Pindar gloried in both the pleasures and the responsibilities of wealth and rank. He sang in praise of pomp and splendor with a vividness which makes us see the chariots flashing down the course and hear the shouting of the multitude as the proud victor receives the laurel wreath of triumph. At the same time his immortal word pictures of the life of the nobles and their triumphs are always suffused with the beauty of unquestioning belief in the gods, especially Apollo, for whom Pindar seemed to speak almost as a prophet. He was the last great spokesman of a dying order of society—the rule of the nobles, which was to give way to the rule of the people. Another great lyric singer of the age was the poetess Sappho, the earliest woman to gain undying fame in literature.

A favorite form of song was the chorus, with which the country folk loved to celebrate their rustic feasts. The poet Stesichorus, who lived in Sicily, began to write choruses which told the stories of the gods as they were found in the old myths. The singers as they marched in rustic procession wore goatskins, and their faces were smeared with wine lees or concealed by masks. It was a presentation of a sacred myth, such as had long before arisen in the Near East. Some of the songs were sung responsively by the chorus and their leader. For the diversion of the listening peasants the leader would illustrate with gestures the story told in the song. He thus be-

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came to some extent an actor, the forerunner of the actors on our own stage. After Pisistratus introduced the spring feast of Dionysus at Athens, this form of presentation made rapid progress. At the beginning of the fifth century a second actor was introduced, and dialogue between the two was then possible, though the chorus continued to recite most of the narrative. Thus arose a form of musical play or drama, the action or narrative of which was carried on by the chorus and two actors. The Greeks called such a play a tragedy, which seems to have meant "goat's play," probably because of the rustic disguise as goats which the chorus had always worn.

The grassy circle where the chorus danced and sang was usually on a slope in the hills, from which the spectators had a fine view of the country and the sea beyond. At Athens the people sat on the slope of the Acropolis, and as they watched the play they could look far across the sea to the heights of Argos. Here, under the southern brow of the Acropolis, where Pisistratus laid out the sacred precinct of Dionysus, the theater began to take form and eventually furnished the arrangements which have since been inherited by us in our theaters.

Architecture made important advances in the Age of Tyrants; for many of the tyrants carried on extensive building operations, such as the construction of harbors, aqueducts, and temples. The Greek cities, including the buildings of the government, were still simply groups of sun-dried brick buildings. Great stone buildings such as we have seen on the Nile had been unknown in Europe since the time of the Ægeans, but now the rough Greek temples of sun-dried brick were rebuilt in limestone by the tyrants. Indeed, the front of the temple of Apollo at Delphi was even built of marble. At no other time before or after were so many temples erected as in the Greek world during the sixth century B.C. In Sicily and southern Italy a number of the noble temples of this age still stand to display to us the beauty and simplicity of Greek architecture even at that undeveloped stage. Instead of the wooden posts of the former period, rows of plain *stone* columns (colonnades), in a style which we call Doric (Fig. 112), surrounded these temples. Although the architects of the tyrants borrowed the idea

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and the form of *these* colonnades from Egypt, they improved them until they made them the most beautiful columns ever designed by early builders. Like the temples on the Nile, those of Greece were painted in bright colors.

The temples were adorned, in the triangular gable end, with sculptured relief figures of the gods, grouped in scenes

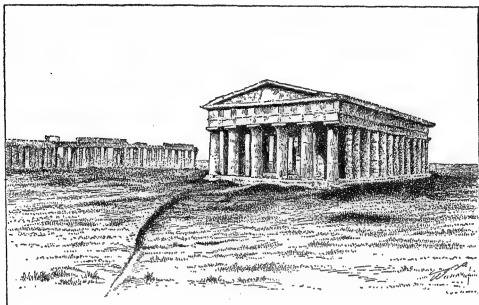


FIG. 112. GREEK TEMPLES AT PÆSTUM IN SOUTHERN ITALY

Pæstum (Greek *Poseidonia*), one of the early Greek colonies in the vicinity of Naples, possesses today the ruins of three Greek temples. The temple of Neptune (Poseidon), the finest of the group, is the best-preserved Greek temple outside of Attica. Built toward the end of the sixth century, and perhaps as late as 500 B.C., it is one of the noblest examples of archaic Greek architecture

representing incidents in the myths. Although at first very much influenced by oriental reliefs, the sculptor soon produced works of real beauty and independence. In meeting the demand for statues of the victors at the games, the Greek sculptors imitated the Egyptian figures they had seen. Their earliest figures in stone were therefore still stiff and ungraceful. Moved by patriotic impulses, however, the Athenian sculptors went still farther and attempted a kind of work which never had arisen in the Near East. They wrought a noble memorial of the two youths who endeavored to free Athens from the sons

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of Pisistratus. It was in the form of a group depicting the two at the moment of their attack on the tyrants; and although it still displayed some of the old stiffness, it also showed remarkable progress in portraying free and vigorous action of the human body. These figures were cast in bronze.

Similar progress was made by the painters of the age. Just as the poets had begun to call upon their own imagination for subject matter, so the vase-painters now began to depict not only scenes from the myths of the gods and heroes, but also pictures from the everyday life of the times (see the school, Fig. 118). At the same time they improved their methods greatly. They made drawings of the human figure that were more natural and true than early artists had ever before been able to do. Their skill in depicting limbs shortened by being seen from one end was surprising. These problems, called foreshortening and perspective, were first solved by the Greek painters. The vases of this age are a wonderful treasury of beautiful scenes from Greek life, reminding us of our glimpses into the life of Egypt two thousand five hundred years earlier, in the tomb-chapel scenes of the Nile.

Literature and painting show us that the Greeks of this age were intensely interested in the life of their own time. In the first place, they were thinking more deeply than ever before about conduct, and they were more than ever inclined to distinguish between right and wrong. Men could no longer believe that the gods led the evil lives pictured in the Homeric songs. The poet Stesichorus had so high an idea of womanly fidelity that he could not accept the tale of the beautiful Helen's faithlessness, and in his songs he denied that Helen had ever gone to Troy. Men now felt that Zeus and his Olympian divinities must do the right. Mortals too must do the same, for men had now come to believe that in the world of the dead there was punishment for the evildoer. Hades became a place of torment for the wicked, guarded by Cerberus, a monstrous dog, one of those sentinel animals of the Near East of which the Sphinx of Gizeh, also guarding the dead, is the oldest example.

Likewise it was believed that there must be a place of



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FIG. 113. SOME EXAMPLES OF THE DEVELOPMENT OF GREEK POTTERY

Employing bands of geometrical designs, the earliest Greek vase-painters produced interesting, though stiff, types of pottery such as the mixing vessel (A). More pleasant was the change to oriental decorative patterns illustrated by the wine jug (B). Provision jar (C) is in the black-figured style produced by applying black-glazed silhouette figures on a red clay ground with incised markings into the black glaze to indicate necessary lines. The Attic vase-painters then worked out the red-figured ware by covering the clay surface with a red ochre wash, sketching in the outlines with a blunt instrument, tracing these with painted lines, putting in the details and filling in the background with black glaze as in the drinking cup (D). The wine jar (E) and the water jar (F) are examples of the same technique with indications of better drawing skill. Although the great paintings of the early Greeks are lost, we have exemplified in their later pottery such as the white oil jug (G) the number of colors, the development of facial expression, and the advance in fine drawing that beautified the murals.

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blessedness for the good in the next world. Accordingly, in the temple at Eleusis, west of Athens, scenes from the mysterious earth life of Demeter and Dionysus, to whom men owed the fruits of the earth, were presented by the priests in dramatic form before the initiated, and in some mysterious way those who viewed them received immortal life. They were promised admission to the Islands of the Blessed, where once none but the ancient heroes could be received. Even the poorest slave was permitted to enter this fellowship and be initiated into the "mysteries," as they were called.

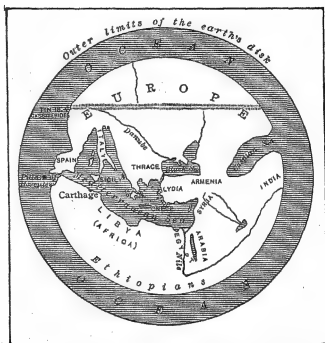
More than ever, also, men now turned to the gods for a knowledge of the future in this world. It was believed that the oracle voice of Apollo revealed the outcome of every untried venture, and his shrine at Delphi became a national religious center, to which the whole Greek world resorted. Apollo was closely connected with the artistic, intellectual, and spiritual development of the Greeks, and the Delphic oracle was a great influence for good throughout Hellas. The oracular responses, while often equivocal, usually tended to point out the just and honorable course of action.

Some thoughtful men, on the other hand, were rejecting the beliefs of older times, especially regarding the world and its control by the gods. The Ionian cities, long the commercial leaders of the Ægean, now likewise led the way in thinking of these new problems. In constant contact with Egypt and the Phœnician cities, they gained the beginnings of mathematics and astronomy as known in the Near East, and one of the Ionian thinkers had indeed set up an Egyptian shadow clock. At Miletus, the most important of these Ionian cities, there was an able statesman named Thales, who had traveled widely and received from Babylonia a list of observations of the heavenly bodies. From such lists the Babylonians had already learned that the eclipses of the sun occurred at periodic intervals. With these lists in his hands Thales could calculate when the next eclipse would occur. He therefore told the people of Miletus that they might expect an eclipse of the sun before the end of a certain year. When the promised eclipse

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(585 B.C.) actually occurred as he had predicted, the fame of Thales spread far and wide.

The prediction of an eclipse, a feat already accomplished by the Babylonians, was not so important as the *consequences* which followed in the mind of Thales. Hitherto men had believed that eclipses and all the other strange things that happened in the skies were caused by the momentary angry whim of some god. Now, however, Thales boldly proclaimed that the movement of the heavenly bodies were in accordance with fixed laws. In the history of human thinking this was probably the most fundamentally important step ever taken. The gods were thus banished from control of the sky-world where the eagle of Zeus had once ruled. So also when a Greek traveler like



MAP OF THE WORLD AFTER HECATEUS
(517 B.C.)

Thales visited the vast buildings of the Near East, such as the pyramids of Gizeh, then over two thousand years old, he at once saw that the gods had not been wandering on earth only a few generations before his own time. This fact seemed to banish the gods from the past, and from the beginning of the world likewise.

Hence another citizen of Miletus, perhaps a pupil of Thales, explained the origin of animals by assuming a development of higher forms from the lower ones, in a manner which reminds us of the modern theory of evolution. He studied the forms

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of the seas and the countries, and he made a map of the world. It is the earliest world map known to us, although maps of a limited region were already in use in Egypt and Babylonia. A little later another geographer of Miletus, named Hecataeus, traveled widely, including a journey up the Nile, and he wrote a geography of the world. In this book, as in the map just mentioned, the Mediterranean Sea was the center, and the lands about it for a short distance back from its shores were all those which were known to the author. On p. 315 is a map drawn according to Hecataeus' description of the world. Hecataeus also put together a history made up of the mythical stories of early Greece and the tales of the past he had heard in the Near East. After the Unknown Historian of the Hebrew patriarchs, Hecataeus was the first historical writer of the early world.

Another Ionian thinker, who migrated to southern Italy, was Pythagoras. He investigated mathematics and natural science. He or his pupils discovered that the square of the hypotenuse of a right-angled triangle equals the sum of the squares of the other two sides. They also found out that the length of a musical string is in exact mathematical relation to the height of its tone. They likewise discovered that the earth is a sphere which possesses its own motion. Another of these Ionians, in his account of the origin of the earth, called attention to the presence of petrified sea plants and fish in the rocks, to prove that the sea had at one time covered the land.

Thus these Ionian thinkers, having gradually abandoned the old myths, took the natural world out of the hands of the gods. They therefore became the forerunners of natural scientists and philosophers, for they strove to discern what were the *natural* laws which in the beginning had brought the world into existence and still continued to control it. At this point in their thinking they entered upon a new world of thought, which we call science and philosophy—a world which had never dawned upon the greatest minds of the early East. This step, taken by Thales and the great men of the Ionian cities, remains and will forever remain the greatest achievement of

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the human intellect—an achievement to call forth the reverence and admiration of all time.

The Age of the Tyrants was therefore one of the great epochs of the world's history. Under the stimulus of the keen struggle for leadership in business, in government, and in society, the minds of the ablest men of the time were wonderfully quickened, till they threw off the bondage of habit and entered an entirely new world of science and philosophy. The inner power of this vigorous new Greek life flowed out in statesmanship, in literature and religion, in sculpture and painting, in architecture and building. As a group the leaders of this age, many of them tyrants, made an impression which never entirely disappeared, and they were called "the Seven Wise Men." They were the earliest statesmen and thinkers of Greece. The people loved to quote their sayings, such as "Know thyself," a proverb which was carved over the door of the Apollo temple at Delphi, or the wise maxim, usually attributed to Solon, "Overdo nothing." After the overthrow of the sons of Pisistratus, however, the tyrants gradually disappeared; and although one survived here and there, especially in Asia Minor and Sicily, Greece at this time (about 500 B.C.) passed out of the Age of the Tyrants.

CHAPTER XIII

THE REPULSE OF PERSIA

The Coming of the Persians

THE leadership gained by the Ionian cities in the Age of the Tyrants was now seriously checked by their neighbors in Asia Minor. Here still lived the descendants of the Early Anatolians, mingled with the Hittites and other later invaders. The kings of Lydia—the leading Anatolian kingdom—made their capital, Sardes, the strongest city of Asia Minor. From them the practice of coinage had passed to the Greeks. The Lydians had finally conquered all the Greek cities along the Ægean coast of Asia Minor except Miletus, which still resisted capture.

The Lydians had been strong enough to halt the Medes, but we remember that when Cyrus the Persian invaded Asia Minor, he defeated Croesus and captured Sardes. In the midst of the most remarkable progress in civilization, the Ionian cities thus suddenly lost their liberty and became the subjects of Persia, a despotic oriental power. Moreover, the sudden advance of Persia to the Ægean made this power at one stroke a close neighbor of the Greek world now arising there. There seemed little prospect that the tiny Greek states, even if they united, could successfully resist the vast oriental empire, controlling as it did all the countries of the ancient East. Nevertheless the Ionian cities dared to revolt against their Persian lords.

During the struggle with Persia which followed this revolt, the Athenians sent twenty ships to aid their Ionian kindred. This act brought a Persian army of revenge, under Darius, into Europe. The long march across the Hellespont and through Thrace cost the Asiatic invaders many men, and the fleet which accompanied the Persian land forces was wrecked in trying to round the high promontory of Mount Athos (492 B.C.). This advance into Greece was therefore abandoned for a plan of invasion by water across the Ægean.

In the early summer of 490 B.C. a considerable fleet of transports and warships bearing the Persian host put out from the island of Samos, sailed straight across the Ægean, and

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entered the straits between Eubœa and Attica. The Persians began by burning the little city of Eretria, which had also sent ships to aid the Ionians. They then landed on the shores of Attica, in the Bay of Marathon, intending to march on Athens, the greater offender. They were guided by the aged Hippias, son of Pisistratus, once tyrant of Athens, who accompanied them with high hopes of regaining control of his native city.

All was excitement and confusion among the Greek states. The defeat of the revolting Ionian cities, and especially the Persian sack of Miletus, had made a deep impression throughout Greece. An Athenian dramatist had depicted in a play the plunder of the unhappy city and so incensed the Athenians that they passed weeping from the theater to prosecute and fine the author. Now this Persian foe who had crushed the Ionian cities was camping behind the hills only a few miles northeast of Athens. After dispatching messengers in desperate haste to seek aid in Sparta, the Athenian citizens turned to contemplate the seemingly hopeless situation of their beloved city.

Thinking to find the Athenians unprepared, Darius had not sent a large army. The Persian forces probably numbered no more than twenty thousand men, but at the utmost the Athenians could put not more than half this number into the field. Fortunately for them there was among their generals a skilled and experienced commander named Miltiades, a man of resolution and firmness, who, moreover, had lived on the Hellespont and was familiar with Persian methods of fighting. To his judgment the commander-in-chief Callimachus yielded at all points. As the citizen-soldiers of Attica flocked to the city at the call to arms, Miltiades was able to induce the leaders not to await the assault of the Persians at Athens, but to march across the peninsula and block the Persian advance among the hills overlooking the eastern coast and commanding the road to the city. This bold and resolute move roused courage and enthusiasm in the downcast ranks of the Greeks.

Nevertheless, when they issued between the hills and looked down upon the Persian host encamped upon the Plain of Marathon, flanked by a fleet of hundreds of vessels, misgiving

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and despair chilled the hearts of the little Attic army, made up as it was of citizen militia without experience in war and pitted against a Persian army of professional soldiers, the victors of many battles. But Miltiades held the leaders firmly in hand, and the arrival of a thousand Greeks from Platæa revived the courage of the Athenians. The Greek position overlooked the main road to Athens, and the Persians could not



FIG. 114. MOUND RAISED AS A MONUMENT TO THE FALLEN GREEKS ON THE PLAIN AT MARATHON

The mound is nearly 50 feet high. Excavations undertaken in 1890 disclosed beneath it the bodies of the one hundred and ninety-two Athenian citizens who fell in the battle. Some of their weapons and the funeral vases buried with them were also recovered

advance without leaving their line of march exposed on one side to the Athenian attack.

Unable to lure the Greeks from their advantageous position after several days' waiting, the Persians at length attempted to march along the road to Athens, at the same time endeavoring to cover their exposed line of march with a sufficient force thrown out in battle array. Miltiades was familiar with the Persian custom of massing troops in the center. He therefore massed his own troops on both wings, leaving his center weak. It was a battle between bow and spear. The Athenians un-

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dauntedly faced the storm of Persian arrows, and then both wings pushed boldly forward to the line of shields behind which the Persian archers were kneeling. In the meantime the Persian center, finding the Greek center weak, had pushed it back, while the two Greek wings closed in on either side and thrust back the Persian wings in confusion. Caught between the two advancing lines of Greeks, the Asiatic army crumbled into a broken multitude. The Persian bow was useless, and the Greek spear everywhere spread death and terror. As the Persians fled to their ships they left over six thousand dead upon the field, while the Athenians lost less than two hundred men. When the Persian commander, unwilling to acknowledge defeat, sailed around the Attic peninsula and appeared with his fleet before the port of Athens, he found it unwise to attempt a landing, for the victorious Athenian army was already encamped beside the city. The Persians therefore retired, and the Persian emperor's plans for making the Ægean and its harbors a part of his far-reaching naval and commercial expansion were completely blocked. We can imagine with what feelings the Athenian citizens watched the formidable Asiatic fleet of Darius as it finally disappeared.

The Greek Repulse of Persians and Phœnicians

Among the men who stood in the Athenian ranks at Marathon was Themistocles, the ablest statesman in Greece, a man who had already served as archon, the chief magistrate of the Athenian state. He was convinced of the necessity of building up a strong navy—a course already encouraged by Pisistratus. As archon, Themistocles had therefore striven to show the Athenians that the only way in which Athens could hope to meet the assault of Persia was by making herself undisputed mistress of the sea. He had failed in his effort. But now the Athenians had seen the Persians cross the Ægean with their fleet and land at Marathon. It was evident that a powerful Athenian navy might have stopped them. They began to listen to the counsels of Themistocles to make Athens the great sea power of the Mediterranean.

Darius the Great died without obtaining naval leadership in

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the west and without having avenged the defeat of his army at Marathon. His son and successor Xerxes made every effort to carry out his father's naval policy, and he now planned a far-reaching assault on Greek civilization all along the line from Greece to Sicily. This he could do through his control of the Phœnician cities. The naval policy of his father Darius had given the Persians a huge Phœnician war fleet. In so far as the coming attack on Greece was by sea it was chiefly a Semitic assault. At the same time Xerxes induced Phœnician Carthage to attack the Greeks in Sicily. Thus the two wings of the great Semitic line, represented by the Phœnicians in east and west (Carthage), were to attack the Indo-European line, represented in east and west by the Greeks. Xerxes was persuaded by his general Mardonius to adopt the Hellespont route.



FIG. 115. COIN OF
PHœNICIAN CITY OF
SIDON, SHOWING ALLI-
ANCE WITH PERSIA

Obverse: Phœnician war-galley; reverse: Persian king in chariot. This is a double shekel of the Phœnician standard, and may be dated to the fifth century B.C. (British Museum)

Meantime the Greeks were making ready to meet the coming Persian assault. They soon saw that Xerxes' commanders were cutting a canal behind the promontory of Athos, to secure a short cut and thus to avoid all risk of such a wreck as had overtaken their former fleet in rounding this dangerous point. When the news of this operation reached Athens, Themistocles was able to induce the Athenian Assembly to build a fleet of probably a hundred and eighty triremes. The Greeks were then able for the first time to meet the Persian advance by both sea and land.

The masterly plan of action devised by Themistocles corresponded exactly to the plan of the Persian advance. The Asiatics were coming in combined land and sea array, with army and fleet moving together down the east coast of the Greek mainland. The design of Themistocles was to meet the

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Persian fleet first with full force and fight a decisive naval battle as soon as possible. If victorious, the Greek fleet commanding the Ægean would then be able to sail up the eastern coast of Greece and threaten the communications and supplies of the Persian army. There must be no attempt of the small Greek army to meet the vast land forces of the Persians, beyond delaying them as long as possible at the narrow northern passes, which could be defended with a few men. An attempt to unite all the Greek states was not successful, but Sparta and Athens combined their forces to meet the common danger. Themistocles was able to induce the Spartans to accept his plan only on condition that Sparta be given command of the allied Greek fleets.

In the summer of 480 B.C. the Asiatic army was approaching the pass of Thermopylæ, just opposite the westernmost point of the island of Eubœa. Their fleet moved with them. The Asiatic host must have numbered over two hundred thousand men, with probably as many more camp followers, while the enormous fleet contained presumably about a thousand vessels, of which perhaps two-thirds were warships. Of these ships, the Persians lost several hundred in a storm, leaving probably about five hundred warships available for action. The Spartan king Leonidas led some five thousand men to check the Persians at the pass of Thermopylæ, while the Greek fleet of less than three hundred triremes was endeavoring to hold together and strike the Persian navy at Artemisium, on the northern coast of Eubœa. Thus the land and sea forces of both contestants were face to face.

After several days' delay the Persians advanced to attack on both land and sea. The Greek fleet made a skillful and creditable defense against superior numbers, and all day the dauntless Leonidas held the pass of Thermopylæ against the Persian host. Meantime the Persians were executing two flank movements by land and by sea—one, led by a traitorous Greek, over the mountains to strike Leonidas in the rear, and the other with two hundred ships around Eubœa to take the Greek fleet likewise from behind. A storm destroyed the flanking Persian ships, and a second combat between the two main fleets was

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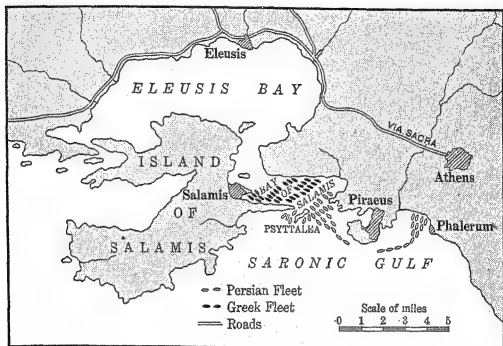
indecisive. The flank movement by sea therefore failed, but the flanking of the pass was successful. Taken in front and rear, the heroic Leonidas died fighting at the head of his small force, which the Persian host completely annihilated. The death of Leonidas stirred all Greece. With the defeat of the Greek land forces and the advance of the Persian army, the Greek fleet, seriously damaged, was obliged to withdraw to the south. It took up its position in the Bay of Salamis (map, p. 325), while the main army of the Spartans and their allies was drawn up on the isthmus of Corinth, the only point at which the Greek land forces could hope to make another defensive stand.

As the Persian army moved southward from Thermopylæ, the indomitable Themistocles gathered together the Athenian population and carried them in transports to the little islands of Salamis and Ægina and to the shores of Argolis. Meantime the Greek fleet had been repaired, and with reinforcements numbered over three hundred battleships. Nevertheless it shook the courage of many at Salamis as they looked northward, where the far-stretching Persian host darkened the coast road, while in the south they could see the Asiatic fleet drawn up off the old port of Athens at Phalerum. High over the Attic hills the flames of the burning Acropolis showed red against the sullen masses of smoke that obscured the eastern horizon and told them that the homes of the Athenians lay in ashes. With masterly skill Themistocles held together the ir-resolute Greek leaders, while he induced Xerxes to attack by the false message that the Greek fleet was about to slip out of the bay.

On the heights overlooking the Bay of Salamis the Persian king, seated on his throne in the midst of his brilliant oriental court, took up his station to watch the battle (480 B.C.). The Greek position between the jutting headlands of Salamis and the Attic mainland was too cramped for the maneuvers of a large fleet. Crowded and hampered by the narrow sea room, the huge Asiatic fleet soon fell into confusion before the Greek attack. There was no room for retreat. The combat lasted the entire day, and when darkness settled on the Bay of Sala-

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mis the Persian fleet had been almost annihilated. The Athenians were masters of the sea, and it was impossible for the army of Xerxes to operate with the same freedom as before. By the creation of its powerful fleet Athens had saved Greece,



THE BATTLE OF SALAMIS

The island of Salamis is separated from Attica by a narrow channel leading into the Bay of Eleusis. This channel is divided in two at its entrance by the low rocky island of Psyttalea. The Persian fleet sailed in from the right (south) and was drawn up in a line facing north between the harbor of Piraeus and the island of Salamis. However, when the order was given to enter the straits, because of the position of Psyttalea the Persian ships could not advance in a long front so as to enfold the Greek fleet. Instead, the Persians passed on either side of the obstructing island in columns, and so were exposed to flank attack from the Greeks, who came into action from the left (northwest of Psyttalea). Persian troops stationed by Xerxes on Psyttalea were all slain by the Greeks

and Themistocles had shown himself the greatest of Greek statesmen.

Xerxes was now troubled lest he should be cut off from Asia by the victorious Greek fleet. Indeed, Themistocles made every effort to induce Sparta to join with Athens in doing this very thing; but the cautious Spartans could not be prevailed upon

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to undertake what seemed to them so dangerous an enterprise. Had Themistocles' plan of sending the Greek fleet immediately to the Hellespont been carried out, Greece would have been saved another year of anxious campaigning against the Persian army. With many losses from disease and insufficient supplies, Xerxes retreated to the Hellespont and withdrew into Asia, leaving his able general Mardonius with an army of perhaps fifty thousand men to winter in Thessaly. Meantime the news reached Greece that the army of Carthaginians which had crossed from Africa to Sicily had been completely defeated by the Greeks under the leadership of Gelon, tyrant of Syracuse. Thus the assault of the Asiatics upon the Hellenic world was beaten back in both east and west in the same year (480 B.C.).

The brilliant statesmanship of Themistocles, so evident to us of today, was not so clear to the Athenians as the winter passed and they realized that the victory at Salamis had not relieved Greece of the presence of a Persian army, and that Mardonius would invade Attica with the coming of spring. Themistocles, whose proposed naval expedition to the Hellespont would have forced the Persian army out of Greece, was removed from command by the factions of his ungrateful city. Nevertheless the most tempting offers from Mardonius could not induce the Athenians to forsake the cause of Greek liberty and join hands with Persia.

As Mardonius, at the end of the winter rains, led his army again into Attica, the unhappy Athenians were obliged to flee as before, this time chiefly to Salamis. Sparta, always reluctant and slow when the crisis demanded quick and vigorous action, was finally induced to put her army into the field. When Mardonius in Attica saw the Spartan king Pausanias advancing through the Corinthian isthmus and threatening his rear, he withdrew northward, having for the second time laid waste Attica far and wide. With the united armies of Sparta, Athens, and other allies behind him Pausanias was able to lead some thirty thousand heavy-armed Greeks of the phalanx, as he followed Mardonius into Boeotia.

In several days of preliminary movements which brought the

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two armies into contact at Plataea (479 B.C.), the clever Persian showed his superiority, outmaneuvering Pausanias and even gaining possession of the southern passes behind the Greeks and capturing a train of their supply wagons. But when Mardonius led his archers forward at double-quick and the Persians, kneeling behind their line of shields, rained deadly volleys of arrows into the compact Greek lines, the Hellenes never flinched, although their comrades were falling on every hand. With the gaps closed up, the massive Greek phalanx pushed through the line of Persian shields, and, as at Marathon, the spear proved invincible against the bow. In a heroic but hopeless effort to rally his broken lines, Mardonius himself fell. The Persian cavalry covered the rear of the flying Asiatic army and saved it from destruction.

Not only European Greece, but Ionia too, was saved from Asiatic despotism; for the Greek triremes, having meantime crossed to the peninsula of Mycale on the north of Miletus, drove out or destroyed the remnants of the Persian fleet. The Athenians now also captured and occupied Sestus, on the European side of the Hellespont, and thus held the crossing from Asia into Europe closed against further Persian invasion. In 476 B.C. Cimon, the son of Miltiades, was made commander-in-chief of the Athenian forces. He gained the position because he was the outstanding candidate among the nobles, but he held the position because he was probably the greatest soldier Athens ever produced. He served his city for the next thirteen years. During that time he reduced all the remaining Persian strongholds in the northern Aegean, and captured the Greek coast cities of southwestern Asia Minor which had been held by Persian garrisons. It was peculiarly fitting that the son of the man who led the Athenians in their first victory over the Persians should finish the work of Themistocles, who had really saved Athens from the Persians.

CHAPTER XIV

THE GROWING RIVALRY BETWEEN ATHENS AND SPARTA AND THE RISE OF THE ATHENIAN EMPIRE

The Beginnings of the Rivalry Between Athens and Sparta

AS THE Athenians returned to look out over the ashes of what was once Athens, amid which rose the smoke-blackened heights of the naked Acropolis, they began to realize the greatness of their deliverance and the magnitude of their achievement. With the not-too-ready help of Sparta, they had met and crushed the hoary power of Asia. They felt themselves masters of the world. The past seemed narrow and limited. A new and greater Athens dawned upon their vision.

Of all this the Spartans, on the other hand, felt very little. The Spartan citizens were all soldiers and devoted themselves exclusively to military training. The state maintained public meals, where each soldier-citizen ate with a group of about fifteen friends, all men, at the same table every day. Each citizen contributed to the support of these meals, and as long as he paid this contribution he retained his citizenship. His lands were cultivated for him by serfs, and his only occupation was military drill and exercise. The state thus became a military machine.

The number of such Spartan soldier-citizens was quite limited, sometimes being all together only a few thousand. As distinguished from the large non-voting population of the other towns in the Laconian peninsula, the citizens of Sparta formed a small superior class. Thus their rule of the larger surrounding population was the tyranny of a limited military class devoted to war and almost without commerce or any interest in the arts and industries. So old-fashioned were they, and so confident in their own military power, that they would not surround their city with a wall. Sparta remained a group of straggling villages, not deserving the name of city and entirely without fine public buildings or great monuments of any kind. Like a large military club or camp, it lived off its own lands, worked by serfs, and from the taxes it squeezed out of

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its subject towns without allowing them any vote. In case of war the two kings were still the military leaders.

We can now understand that the stolid Spartans, wearing the fetters of a rigid military organization, and gifted with no imagination, looked with misgivings upon the larger world which was opening to Greek life. Although they desired to lead Greece in military power, they shrank from assuming the responsibilities of expansion. They represented the past and the privileges of the few. Athens represented the future and the rights of the many. Thus Greece fell into two camps as it were: Sparta, the bulwark of tradition and limited privileges; Athens, the champion of progress and the sovereign people. The sentiment of union born in the common struggle for liberty, which might have united the Hellenes into one Greek nation, was followed by an unquenchable rivalry between the two leading states of Hellas, a rivalry so persistent that it went on for another century and finally cost the Greeks the supremacy of the ancient world.

Although Themistocles was never again permitted to serve Athens as general, yet for some time after the Persian Wars he exercised great influence on the Athenians, and guided Athens in her policy of progress and expansion. He had directed the construction of the Athenian navy, and he had established a naval base at the Piræus five miles away on the seacoast. Themistocles saw that if the Athenians could fortify their city and their seaport, and could maintain a powerful fleet, they need never fear starvation in case of siege. He realized, however, that the Spartans would object violently to the erection of fortifications around Athens. And Sparta, because of her military supremacy, had been accustomed to dictate the policies of the other Greeks. Themistocles now determined that Athens should no longer follow Sparta. He cleverly hoodwinked the Spartans and in spite of their objections completed the erection of strong walls around a new and larger Athens. At the same time he fortified the three natural harbors on the Piræus. When, therefore, the Spartans, after the victory over Persia, refused to continue the command of the combined Greek fleets, and the great Athenian fleet, the creation of The-

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mistocles, became mistress of the Ægean, his plans for the supremacy of Athens in Greece seemed to be on a fair way toward success.

The Rise of the Athenian Empire and the Triumph of Democracy

As the Greek cities of Asia still feared the vengeance of the Persian king, it was easy for the Athenians to form a permanent defensive league with the cities of their Greek kindred in Asia and the Ægean islands. The wealthier of these cities contributed ships, while others paid a sum of money each year into the treasury of the league. Athens was to have command of the combined fleet and collect the money. She placed in charge of the important task of adjusting all contributions of the league and collecting the tribute money a patriotic citizen named Aristides, whose friends called him "the Just" because of his honesty. He had opposed the naval plans of Themistocles and when defeated had been ostracized, but he had later distinguished himself at Salamis and Plataea. In spite of his former opposition to Themistocles' plans, he now did important service in vigorously aiding to establish the new naval league. The treasure he collected was placed for protection in the temple of Apollo, on the little island of Delos. Hence the federation was known as the Delian League (478-477 B.C.). It was completed within three years after Salamis. The transformation of such a league into an empire, made up of states subject to Athens, could be foreseen as a very easy step. In the meantime the Athenian fleet protected the interests of the Greeks in the Ægean Sea. The waters were cleared of the pirate ships which had long sailed forth from the island of Scyros. Greek trade in the east flourished as never before.

As we have seen, the leadership of Athens in Greece had been planned by Themistocles, but he was not permitted by his fellow citizens to take part in the further development of Athenian supremacy. Cimon was the hero of the last phases of the Greek conflict with Persia (p. 327), and he soon became more popular in Athens than Themistocles. The latter, a man without family background of state service and social position,

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was no match for Cimon, who was the descendant of one of the oldest noble families of Athens. In 471 B.C., therefore, Themistocles was ostracized. He took up his residence on the Peloponnesian peninsula and occupied his time in stirring up the Peloponnesian cities against Sparta. Finally Sparta, in desperation over his anti-Spartan intrigues, accused Themistocles to the Athenians of treasonable relations with the Persians. The old rulers of Athens, the nobles, were delighted to find an excuse to rid themselves entirely of this upstart, who still had some friends in Athens. Themistocles was charged with treason, and, knowing that he would in all likelihood be condemned to death, he escaped by flight into Persian territory, where he was well received. The greatest statesman in Athenian history, therefore, spent the rest of his life in the service of the Persian king.



FIG. 116. POTTERY SHERD BEARING NAME OF THEMISTOCLES, CAST AS A VOTE FOR HIS OSTRACISM IN 471 B.C.

After the votes had been counted, they were thrown out on some rubbish heap and thus survived to our day as dramatic witnesses to the reckless animosities of Athenian politics

In spite of the anti-Spartan plans of Themistocles, the relations between Athens and Sparta were not definitely unfriendly for ten or twelve years after the wars with Persia. The man who did the most to promote a friendly feeling with Sparta was Cimon, who had returned to Athens as her foremost citizen. Cimon does not seem to have been of the opinion that Athenian supremacy in Greece was necessary or desirable. He was in favor, on the other hand, of strengthening the alliance between Athens and Sparta, the two leading Greek states. Apparently he was thinking of Persia, the common enemy of the Greeks, and had not considered the fundamental differences between the Greeks themselves. Cimon belonged, moreover, to the conservative party, which was composed of the noble,

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wealthy, and old-fashioned folk. These people were very comfortable, and saw no need to change things. They were frightened at the evidence of progress around them—at the growth of the small shops, at the presence of foreign craftsmen, at the rise of great commoners like Themistocles. Particularly the conservative party wished to maintain the old outwardly friendly relations with Sparta. Thus it was that, in response to a request from the Spartans for help in quelling a revolt of Spartan serfs, Cimon urged the dispatch of Athenian troops to Sparta. Herein Cimon overestimated the good feeling of the Spartans toward Athens, for in spite of the continuance of the revolt the Spartans, as usual, became suspicious and after a time curtly demanded the withdrawal of the very Athenian troops they had asked for. The Athenians were greatly humiliated at this rebuff, and by the spring of 461 B.C. Cimon had completely lost favor in Athens and was ostracized.

The overthrow of Cimon was a victory of the people against the nobles. They followed it up by attacking the Areopagus, or the Council of Elders, once made up only of nobles. The people now passed new laws restricting the power of the Areopagus to the trial of murder cases and the settlement of questions of state religion, thus completely depriving it of all political power. The Council of Five Hundred had, on the other hand, gained the power to conduct most of the government business. At the same time the citizen-juries introduced by Solon as a court of appeal were greatly enlarged. Such a jury was really a group or court of temporary judges deciding cases brought before them. The poorest citizens could not afford to leave their work to serve on these juries, and so the people passed laws granting pay for jury service. These citizen-courts were at last so powerful that they formed the final lawmaking body in the state, and, in cooperation with the Assembly, they made the laws. The people were indeed in control.

Furthermore, the right to hold office was greatly extended. All citizens were permitted to hold the office of archon except members of the laboring class entirely without property. With one exception there was no longer any *election* of the higher

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officers, but they were now all *chosen by lot* from the whole body of eligible citizens. The result was that the men holding the once influential positions in the state were now mere chance "nobodies" and hence completely without influence. But at the same time the public services now rendered by so large a number of citizens were a means of education and of very profitable experience. Athens was gaining a more intelligent body of citizens than any other ancient state.

There was one kind of officer whom it was impossible to choose by lot, and that was the military commander (*strategos*). This important office remained elective and thus open to men of ability and influence, into whose hands the direction of affairs naturally fell. There were ten of these generals, one for each of the ten tribes established by Clisthenes, and they not only led the army in war but they also managed the war department of the government, had large control of the government treasury, and of the Empire, including foreign affairs. The leader, or commander-in-chief (*strategos autocrator*), of this body of generals was the most powerful man in the state, and his office was elective. It thus became more and more possible for a man with military training to make himself a strong and influential leader and, if he was a person of persuasive eloquence, to lay out a definite series of plans for the nation, and by his oratory to induce the Assembly of the Athenian citizens to accept them.

After the fall of Cimon there came forward a handsome and brilliant young Athenian named Pericles, the grandnephew of Clisthenes, and thus of noble blood. He desired to build up the splendid Athenian Empire of which Themistocles had dreamed. Pericles put himself at the head of the party of progress favoring increased power of the people, although there may be some uncertainty about the sincerity of his belief in democracy; for he secured the passage of a law (451 B.C.) limiting citizenship exclusively to children of free-born parents on both sides. This reduced the number of citizens. Nevertheless he kept their confidence year after year and no great opposition was offered to his continued reelection as *strategos autocrator*. The result was that he became the actual

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head of the state in power, or, as we might say, he was the undisputed political "boss" of Athens from about 460 B.C. until his untimely death over thirty years later.

Commercial Development and the Opening of the Struggle Between Athens and Sparta

A period of commercial prosperity followed the Persian Wars, which gave the Greeks a leadership in trade like that of the English before the World War. Corinth and the little island of Ægina at the front door of Attica, and visible from Athens, rapidly became the most flourishing trading cities in Greece. They were at once followed, however, by the harbor town of Piræus, built by the foresight of Themistocles as the port of Athens. Along its busy docks were moored Greek ships from all over the Mediterranean world, for the defeat of the Phœnicians in east and west had broken up their merchant fleets and thrown much of their trade into the hands of the Greeks. Here many a Greek ship from the Black Sea, laden with grain or fish, moored alongside the grain ships of Egypt and the mixed cargoes from Syracuse; for Attica was no longer producing food enough for her own need, and it was necessary to import it. The docks were piled high with goods from the Athenian factories, and long lines of perspiring porters were loading them into ships bound for all the harbors of the Mediterranean. Scores of battleships stretched far along the shores, and the busy shipyards and dry docks were filled with multitudes of workmen and were noisy with the sound of many hammers.

In spite of progress in navigation, we must not think of these ancient ships of Greece as very large. A merchant vessel carrying from two hundred and fifty to three hundred tons was considered large in fifth-century Greece. Ships still clung timidly to the shore, and rarely ventured to sea in the stormy winter season. They had no compass or charts, there were no lighthouses, and they were often plundered by pirates, so that commerce was carried on at great risks. Moreover, ships did not last as long as with us, and it was found necessary to keep them under cover in sheds when they were not in use, for

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although the ancient peoples eventually learned to paint the outside of the ships with tar or wax, of course they knew nothing of the copper sheathing which is used for the protection of wooden vessels today.

On the other hand, the profits gained from sea-borne commerce might be considerable. A vessel which reached the north shores of the Black Sea or the pirate-infested Adriatic might sell out its cargo so profitably as to bring back to the owner double the first cost of the goods, after paying all expenses. Plenty of men were therefore willing to risk their capital in such ventures, and indeed many borrowed the money to do so. Interest was lower than in Solon's day, and money could be borrowed at 10 and 12 per cent. The returns from manufacturing industry were also high, even reaching 30 per cent.

To measure this increased prosperity of Athens we must not apply the scale of modern business. A fortune of ten thousand dollars was looked upon as considerable, while double that amount was accounted great wealth. The day laborer's wages were from six to ten cents a day, while the skilled craftsman received as much as twenty cents a day. Greek soldiers were ready to furnish their own arms and enter the ranks of any foreign king at five dollars a month. A man of intellect, like an architect, received only from twenty to thirty cents a day, while the tuition for a course in rhetoric lasting several years cost the student from sixty to eighty dollars.

For nearly thirty years after the Persian Wars it was easy to obtain Athenian citizenship. Some thirty thousand strangers therefore soon settled in Athens to share in its prosperity. Its population seems to have risen to above a hundred thousand in the days of Pericles, while the inhabitants of Attica may have numbered over two hundred thousand. This included probably eighty thousand slaves, still the cheapest form of labor obtainable.

As a result of increased business there was a greater amount of money in circulation at Athens. Metal for coinage was secured from the state-owned silver mines at Laurium in southern Attica. These mines had been an important source of public revenue since the time of Pisistratus. Great care was taken

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that the Attic currency be kept pure: and it would seem that during the fifth century B.C. Athens attempted to make her "owl" (Fig. 109) the principal silver coin of the Eastern Mediterranean, as the Persian daric was the principal gold one. Naturally, as money became more plentiful in Athens, its value decreased, and a given sum would not buy as much as formerly. That is to say, prices went up. A measure of barley cost twice as much, and a sheep five times as much, as in Solon's day. Nevertheless living would be called very cheap from our point of view. Even the well-to-do citizen did not spend over ten or twelve cents a day in food for his family, and a man of wealth was very extravagant if he owned furniture to the amount of two hundred dollars.

Money had now become very necessary in carrying on the government. Formerly service to the state had been without pay. This was quite possible in a nation of peasants and shepherds; but with the incoming of coined money and steady employment in factories, it was no longer possible for a private citizen to give his time to the state for nothing. Many a citizen of Athens bought the bread his family needed for the day with the money he had earned the day before. The daily salaries to thousands of jurymen, and to the members of the Council of Five Hundred, who were also paid, amounted to not less than a hundred thousand dollars a year. Large sums, even sums that would be large today, were also required for building the sumptuous marble temples now frequently dedicated to the gods; while the offerings, feasts, and celebrations at these temples also consumed great sums.

Greater than all the other expenses of the state, however, was the cost of war. The cost of arming citizens who could not undertake this expense themselves and of feeding the army in the field, of course, fell upon the state. The war fleet was, however, the heaviest of all such expenses. Besides the first cost of building and equipping the battleships, there was always the further expense of maintaining them. A trireme, manned with about two hundred sailors and oarsmen, receiving daily half a drachma (nearly ten cents) per man, cost nearly six hundred dollars per month. A fleet of two

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hundred triremes therefore required nearly a hundred and twenty thousand dollars a month for wages.

The problem of securing the funds for maintaining and defending a nation had become a grave one. As for Athens, the silver mines, however helpful, were far from furnishing enough to support the government. The bulk of the state funds had to be raised by taxation. The triumphant democracy disliked periodic taxes, and they assessed taxes only when the treasury was very low, especially in war time. Besides taxes the treasury received a good income from the customs duty on all goods imported or exported through Piræus. The Athenians kept these duties low, assessing only one per cent of the value of the goods until forced by war expenses to raise them. We have already mentioned the contributions (tribute) of the subject states of the empire. The total income of the Athenian state hardly reached three quarters of a million dollars in the days of Pericles.

Small as this seems to us of modern times, no other Greek state could raise anything like such an annual income. Least of all could Sparta hope to rival such resources. Without the enterprise to enter the new world of commercial competition, Sparta clung to her old ways. She still issued only her ancient iron money and had no silver coins. To be sure, the standing army of Sparta was always ready without expense to the government; but when she led forth the combined armies of the Peloponnesian League, she could not bear the expense longer than a few weeks. The still greater expense of a large war fleet was quite impossible for either Sparta or her League. In so far as war was a matter of money, the commercial growth of Athens was giving her a constantly growing superiority over all other Greek states. We can understand then with what jealousy and fear Sparta viewed Athenian prosperity.

Pericles had won favor with the people by favoring a policy of hostility to Sparta. Foreseeing the coming struggle with Sparta, Pericles greatly strengthened the defenses of Athens by inducing the people to connect the fortifications of the city with those of the Piræus harbor by two Long Walls, thus forming

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a road completely walled in, connecting Athens and her harbor.

Not long after Pericles gained the leadership of the people, the inevitable war with Sparta broke out. It lasted nearly fifteen years, with varying fortunes on both sides. The Athenian merchants resented the keen commercial rivalry of Ægina, planted as the flourishing island was at the very front door of Attica. They finally captured the island after a long siege. Pericles likewise employed the Athenian navy in blockading for years the merchant fleets of the other great rival of Athens and friend of Sparta, Corinth, and thus brought financial ruin on its merchants.

At the same time Athens dispatched a fleet of two hundred ships to assist Egypt, which had revolted against Persia. The Athenians were thus fighting both Sparta and Persia for years. The entire Athenian fleet in Egypt was lost. This loss so weakened the Athenian navy that the treasury of the Delian League was no longer safe in the little island of Delos against a possible sea raid by the Persians. Pericles therefore shifted the treasury from Delos to Athens, an act which made the city more than ever the capital of an Athenian empire.

When peace was concluded (445 B.C.) all that Athens was able to retain was the island of Ægina, though at the same time she gained control of the large island of Eubœa. It was agreed that the peace should continue for thirty years. Thus ended what is often called the First Peloponnesian War with the complete exhaustion of Athens as well as of her enemies in the Peloponnesus. Pericles had not shown himself a great naval or military commander in this war. The Athenians had also arranged a peace with Persia, over forty years after Marathon. But the rivalry between Athens and Sparta for the leadership of the Greeks was still unsettled. The struggle was to be continued in another long and weary Peloponnesian War. Before we proceed with the story of this fatal struggle we must glance briefly at the new and glorious Athens now growing up under the leadership of Pericles.

CHAPTER XV

ATHENS IN THE AGE OF PERICLES

Society, the Home, Education and Training of Young Citizens

THE population of Attica was made up of citizens, resident aliens, and slaves. A large group of wealthy citizens lived at Athens upon the income from their lands. They continued to be the aristocracy of the nation, for land was still the most respectable form of wealth. The wealthy manufacturer hastened to buy land and join the landed aristocracy. The social position of his family might thus become an influential one, but it could not compare with that of a noble.

On the other hand, anyone who actually performed manual labor was looked down upon as without social station. Athens was a great beehive of skilled craftsmen and small shopkeepers. These classes were beginning to organize into guilds or unions of masons, carpenters, potters, jewelers, and many others—organizations somewhat like our labor unions. Below them was a great number of unskilled laborers, free men, but little better than slaves, like the army of porters who swarmed along the docks at Piræus. All these classes contained many citizens. Nevertheless the majority of the Athenian citizens were still the farmers and peasants throughout Attica, although the Persian devastation had seriously reduced the amount of land still cultivated.

The hasty rebuilding of Athens after the Persians had burned it did not produce any noticeable changes in the houses, nor were there any of great size or splendor. Indeed, there were few luxurious private houses in Greece. The one-story front of even a wealthy man's house at Athens was simply a blank wall, usually of sun-dried brick, rarely of broken stone masonry. Often without any windows, it showed no other opening than the door, but a house of two stories might have a small window or two in the upper story. The door led into a court open to the sky and surrounded by a porch with columns. Here in the mild climate of Greece the family could spend much of their time as in a sitting room. In the middle stood an altar of the household Zeus, the protector of the

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family; while around the court opened a number of doors leading to a living room, sleeping rooms, dining room, store-rooms, and also a tiny kitchen.

This Greek house lacked all conveniences. There was no chimney, and the smoke from the kitchen fire, though intended to drift up through a hole in the roof, choked the room or floated out of the door. In winter gusty drafts filled the house, for many doorways were without doors, and glass in the form of flat panes for the windows was still unknown. In the mild Greek climate, however, a pan of burning charcoal, called a brazier, furnished enough heat to temper the chilly air of a room. Lacking windows, the ground-floor rooms depended entirely on the doors opening on the court for light. At night the dim light of an olive-oil lamp was all that was available. There was no plumbing or piping of any kind in the house, no drainage, and consequently no sanitary arrangements. The water supply was brought in jars by slaves from the nearest well or fountain.

The floors were simply of dirt, with a surface of pebbles tramped and beaten hard. There was no oil paint, and a plain water-color wash, such as we call calcimine, might be used on the inside, but if used on the outside would soon wash off, exposing the mud brick. The simplicity and bareness of the house itself were in noticeable contrast with the beautiful furniture which the Greek craftsmen were now producing. There were also many metal utensils, among which the ladies' hand mirrors of polished bronze were common; and most numerous of all were lovely painted jars, vases, and dishes, along with less pretentious pottery forming the household crockery.

The view from the Acropolis over the sea of low flat roofs disclosed not a single chimney, but revealed a much larger city than formerly. Though not laid out in blocks, the city was about ten modern city blocks wide and several more in length. The streets were merely lanes or alleys, narrow and crooked, winding between the bare mud-brick walls of the low houses standing wall to wall. There was no pavement, nor any sidewalk, and a stroll through the town after a rain meant wading through the mud. All household rubbish and

garbage was thrown directly into the street, and there was no system of sewage. When one passed a two-story house he might hear a warning cry and spring out of the way barely in time to escape being deluged with sweepings or filth thrown from a second-story window. The few wells and fountains fed by city water pipes did not furnish enough water to flush the streets, and there was no system of street cleaning. During the hot summers of the south, therefore, Athens was not a healthful place of residence.

All Athens lived out of doors as much as possible. Athenian men came home when they wished to sleep or when they were not invited to eat elsewhere. For most Athenian *citizens* the daily routine consisted in devoting themselves to affairs of state, such as service in the Council of Five Hundred, the Assembly and the jury, or in merely lounging in the public gardens or porches (*stoas*) and chatting. As the Athenian democracy developed—particularly after the state began to pay for service on the juries, Council, and elsewhere—the citizens were engaged less and less in trade, and they had thus more leisure for discussion and recreation. Every Athenian spent some part of each day in the market place. Here were located certain government buildings and all the retail shops. Business was usually concluded by noon, and following a pleasant afternoon spent in social conversation, political discussion, or philosophical speculation, the citizen generally made preparations for the evening banquet which might last most of the night.

The Athenian women had no share in the intellectual life of the men, nor could they appear at social meetings, where serious conversation was carried on. Citizens of the better class kept their wives in the background. The references to women in the literature of the period are, moreover, often contemptuous. There was no family life in the home such as we know it. There was, on the other hand, a certain loyalty to the family and a recognition of the obligations involved in family relationships.

Athenian children were under the care of their mother and a nurse until they were about seven or eight years old. At

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that time the boy was usually started in school, and the girl retired to the seclusion of the women's quarters to learn housewifery. The boy was placed in charge of a man slave called a pedagogue (*paidagogos*), which really means "leader of a child," who accompanied him everywhere he went. The pedagogue was supposed to supervise the boy's conduct and give him lessons in deportment. There are interesting statu-

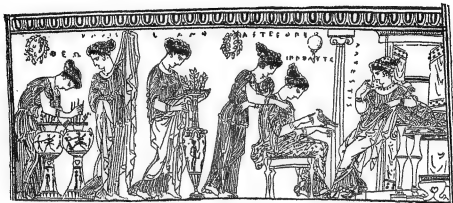


FIG. 117. VASE-PAINTING, SHOWING HOUSE OF A BRIDE THE DAY AFTER THE WEDDING

At the right, leaning against a couch, is the bride. Before her are two young friends, one sitting, the other standing, both playing with a tame bird. Another friend approaches, carrying a tall and beautiful painted vase as a wedding gift. At the left a visitor arranges flowers in two painted vases, while another lady, adjusting her garment, is looking on. The walls are hung with festive wreaths. The furniture of such a house was usually of wood; but if the owner's wealth permitted, it was adorned with ivory, silver, and gold. It consisted chiefly of beds, like the couch above, chairs, footstools (as at foot of couch above), small individual tables, and clothing chests which took the place of closets

ettes and vase-paintings showing the youngster on his way to school. The pedagogue carries the books, the flute or lyre, and the writing tablet. In certain other charming statuettes the old slave appears with his charge on his shoulder and a lantern in his hand; these may represent the pedagogue's return from school with the weary boy, for the school day did not end till sun-down. There were no schools maintained by the state, and no schoolhouses. Usually some poor citizen, perhaps an old soldier or even a foreigner, conducted school in his own house. The teacher was much looked down upon.

SOCIETY, THE HOME, AND CHILD TRAINING

He received his pay from the parents; but there was a board of state officials appointed to look after the schools and to see that nothing improper was taught.

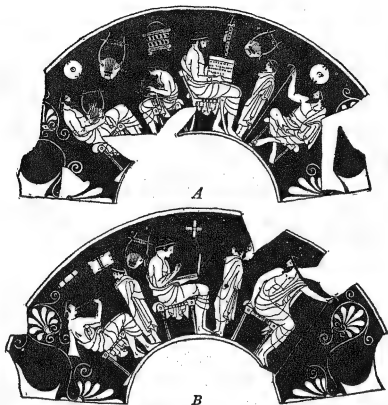


FIG. 118. AN ATHENIAN SCHOOL IN THE AGE OF PERICLES

These scenes are painted around the center of a shallow bowl; hence their peculiar shape. In *A* we see at the left a music teacher seated at his lyre, giving a lesson to the lad seated before him. In the middle sits a teacher of reading and literature, holding an open roll from which the boy standing before him is learning a poem. Behind the boy sits the pedagogue. In *B* we have at the left a singing lesson, aided by the flute to fix the tones. In the middle the master sits correcting an exercise handed him by the boy standing before him, while behind the boy sits the pedagogue as before

Without special education for his work, the teacher merely taught without change the old-time subjects he had learned in his own youth. Proficiency in music was regarded very seriously by the Greeks, not merely for entertainment but also and chiefly as an influence toward good conduct. Besides learning to read and write as of old, the pupil learned by

ATHENS IN THE AGE OF PERICLES

heart many passages from the poets, and here and there a boy with a good memory could repeat the entire Iliad and Odyssey. On the other hand, the boys still escaped all instruction in mathematics, geography, or natural science. This was doubtless a welcome exemption, for the masters were severe, and the Greek boy hated both school and schoolmaster.

When the Athenian lad reached the age of eighteen years and left school, he was received as a citizen, providing that both his parents were of Athenian citizenship. The oath which he took was a solemn reminder of the obligations he now assumed. It had been composed by Solon, and it called upon the youth "never to disgrace his sacred arms; never to forsake his comrade in the ranks, but to fight for the sacred temples and the common welfare, whether alone or with others; to leave his country not in a worse, but in a better state than he found it; to obey the magistrates and the laws and to defend them against attack; finally to hold in honor the religion of his country."

The youth then spent a year in garrison duty at the harbor of Piræus, where he was put through military drill. Then at nineteen the young recruits received spear and shield, given to each by the state. Thereupon they marched to the theater and entered the orchestra circle, where they were presented to the citizens of Athens assembled in the theater before the play. Another year of garrison service on the frontier of Attica usually completed the young man's military service, although some of the recruits, whose means permitted, joined the small body of select Athenian cavalry.

On completion of his military service, if the wealth and station of his family permitted, the Athenian youth was more than ever devoted to the new athletic fields in the beautiful open country outside the city walls. On the north of Athens, outside the Dipylon Gate, was the field known as the Academy. It had been adorned by Cimon, who gave great attention to the olive groves, and, with its shady walks and seats for loungers, it became a place where the Athenians loved to spend their idle hours. On the east of the city there was another similar athletic ground known as the Lyceum. The

HIGHER EDUCATION AND PUBLIC SPIRIT

later custom of holding courses of instructive lectures in these places finally resulted in giving to the words "academy" and "lyceum" the associations which they now possess for us.

The chief athletic events were boxing, wrestling, running, jumping, casting the javelin, and throwing the disk. Omitting the boxing, the remaining events formed a fivefold match called the *pentathlon*, which it was a great honor to win at Olympia. The earliest contest established at Olympia seems to have been a two-hundred-yard dash, which the Greeks called a *stadion*, that is, six hundred Greek feet. Many other contests were added to this; and in the age of Pericles boxing, or boxing and wrestling combined, the pentathlon, chariot racing, and horseback races made up a program in which all Greek youths were anxious to gain distinction. A generation later some of the philosophers severely criticized the Greeks for giving far too much of their time and attention to athletic pursuits.

But other pastimes less worthy were common. An hour or two of gossip with his friends in the market place often preceded the Greek youth's daily visit to the athletic grounds. He might pass the afternoon in dawdling about in the barber shop or dropping in at some drinking resort to shake dice or venture a few drachmas in other games of chance. As the shadows lengthened in the market place he frequently joined a company of young men at dinner at the house of a friend. Often followed by heavy drinking of wine and much singing with the lyre, such a dinner might break up in a drunken carouse leading to harum-scarum escapades upon the streets, such as in our time would cause the arrest of the company for disorderly conduct.

Higher Education, Science, and the Training Gained by State Service

On the other hand, there were serious-minded men, to whom such dinners meant delightful conversation with their companions on art, literature, music, or personal conduct. Such life among the Athenians had now been quickened by the appearance of more modern private teachers called Soph-

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ists, a class of new and clever-witted lecturers who wandered from city to city. Many a bright youth who had finished his music, reading, and writing at the old-fashioned private school annoyed his father by insisting that such schooling was not enough and by demanding money to pay for a course of lectures delivered by one of these new teachers.

For the first time a higher education was thus open to young men who had hitherto thought of little more than a victory in the Olympic games or a fine appearance when parading with the crack cavalry of Athens. The appearance of the new teachers therefore marked a new age in the history of the Greeks, but especially in that of Athens. In the first place, the Sophists recognized the importance of effective public speaking in addressing the large citizen juries or in speaking before the Assembly of the people. The Sophists therefore taught rhetoric and oratory with great success, and many a father who had no gift of speech had the pleasure of seeing his son a practiced public speaker. It was through the teaching of the Sophists also that the first successful writing of Greek prose began. At the same time they really founded the study of language, which was yet to become grammar. They also taught mathematics and astronomy, and the young men of Athens for the first time began to learn a little natural science. Thus the truths which Greek philosophers had begun to observe in the days of Thales were, after a century and a half, beginning to spread among the people.

In these new ideas the fathers were unable to follow their sons. When a father of that day found in the hands of his son a book by one of the great Sophists, which began with a statement doubting the existence of the gods, the new teachings seemed impious. The old-fashioned citizen could at least vote for the banishment of such impious teachers and the burning of their books, although he heard that they were read aloud in the houses of the greatest men of Athens. Indeed, some of the leading Sophists were friends of Pericles, who stepped in and tried to help them when they were prosecuted for their teachings. The revolution which had taken place in the mind of Thales was now taking place in the minds of ever-increas-

HIGHER EDUCATION AND PUBLIC SPIRIT

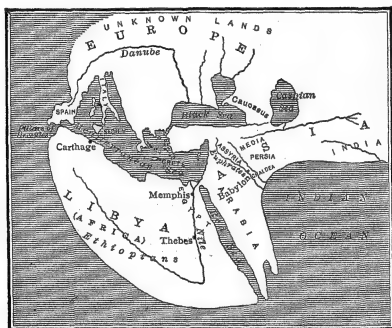
ing numbers of Greeks, and the situation was yet to grow decidedly worse in the opinion of old-fashioned folk.

In spite of the spread of knowledge due to the Sophists, the average Athenian's acquaintance with science was still very limited. This gave him great trouble in the measurement of time. He still called the middle of the forenoon the "time of full market," and the Egyptian shadow clock in the market place had not yet led him to speak of an hour of the day by *number*, as the Egyptians had been doing for a thousand years. When it was necessary to limit the length of a citizen's speech before the law-court, it was done by allowing him to speak as long as it took a given measure of water to run out of a jar with a small hole in it. The Greeks still used the moon-months, and they were accustomed to insert an extra month every third, fifth, and eighth year. To be sure, they had often seen on the Pnyx, where the Assembly met, a strange-looking tablet bearing a new calendar, set up by a builder and engineer named Meton. From the work of the Chaldean astronomers this man had learned the length of the year with only a small error. He had then devised his new calendar with a year still made up of moon-months, but so cleverly arranged that the last day of the last moon-month in every nineteenth year would also be the last day of the year as measured by the sun. But all this was quite beyond the average citizen's puzzled mind. The archons too shook their heads at it and would have nothing to do with it. The old, inconvenient, inaccurate moon-month calendar, with three thirteen-month years in every eight years, was quite good enough for them and continued in use.

Individual scientists continued to make important discoveries. One of the greatest of these was Anaxagoras, a resident alien from Clazomenæ. He was a close friend of Pericles, and probably lived at Athens for some thirty years. Anaxagoras taught that the sun was a glowing mass of stone "larger than the Peloponnesus." He maintained also that the moon received its light from the sun, that it had mountains and valleys like the earth, and that it was inhabited by living creatures.

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Travel for the Greeks of this age was difficult, for there were no passenger ships. Except rough carts or wagons, there were no conveyances by land. The roads were bad, and the traveler went on foot or rode a horse. Nevertheless, Greeks with means were now beginning to travel more frequently. This, however, was for information; travel for pleasure was still a century and a half in the future. From long journeys in Egypt and other eastern countries, Herodotus, a citizen of Halicarnassus



MAP OF THE WORLD ACCORDING TO HERODOTUS

in Asia Minor, returned with much information regarding these lands. His map showed that the Red Sea connected with the Indian Ocean, a fact unknown to his predecessor Hecataeus (see map, p. 315). The scientists were still much puzzled by the cold of the north and the warmth of the south, a curious difference which they could not yet explain.

Although without the microscope or the assistance of chemistry, medicine had nevertheless made progress. In the first place, the Greek physicians rejected the older belief that disease was caused by evil demons, and, like the great unknown Egyptian surgeon, they endeavored to find the *natural causes* of the ailment. To do this they sought to understand the

organs of the body, and the ancient Greeks themselves acknowledge their great debt to Egyptian medicine in such matters. As it was thus already known that the brain was the seat of control of the human limbs (p. 91), it was but a step to identify the brain as the seat of consciousness and the organ of thought. But the arterial system, the circulation of the blood, and the nervous system were still entirely unknown. Without a knowledge of the circulation of the blood, surgery was unable to attempt amputation, but otherwise it made much progress. The greatest physician of the time was Hippocrates, the founder of scientific medicine. The fame of Greek medicine was such that the Persian king called a Greek physician to his court.

Just at the close of Pericles' life, in the midst of national calamities, the historian Herodotus, who had long been at work on his history, finally published his great work. It was a history of the world so told that the glorious leadership of Athens would be clear to all Greeks and would show them that to her the Hellenes owed their deliverance from Persia. Throughout Greece it created a deep impression, and so tremendous was its effect in Athens that, in spite of the financial drain of war and even though Herodotus was a resident alien, the Athenians voted the historian a reward of ten talents, some twelve thousand dollars. In this earliest history of the world which has come down to us, Herodotus traced the course of events as he believed them to be directed by the will of the gods, and as prophesied in their divine oracles. There was little or no effort to explain historical events as the result of natural processes.

Besides the instruction received from the Sophists by many young men, their constant share in public affairs was giving them an experience which greatly assisted in producing an intelligent body of citizens. In the Council of Five Hundred, citizens learned to carry on the daily business of the government. On some days also as many as six thousand citizens might be serving as jurors. This service alone meant that one citizen in five was engaged in duties which sharpened his wits and gave him some training in legal and business affairs.

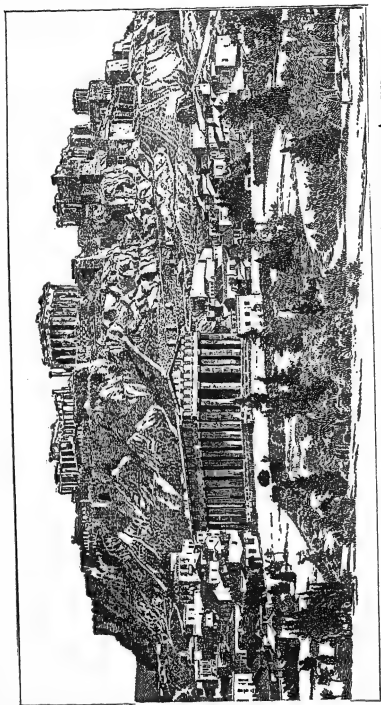


FIG. 119. THE SO-CALLED TEMPLE OF THESEUS AND THE ACROPOLIS OF ATHENS

In the foreground is the temple of Theseus, built of Pentelic marble. It was finished a few years after the death of Pericles, but now, after twenty-three hundred years or more, it is still the best preserved of all ancient Greek buildings. The buildings we see on the Acropolis are all ruins of the structures erected after the place had been laid waste by the Persians. The Parthenon, in the middle of the hill, shows the gaping hole caused by the explosion of a Turkish powder magazine ignited by a Venetian shell in 1687, when the entire central portion of the building was blown out

HIGHER EDUCATION AND PUBLIC SPIRIT

At the same time such duties kept constantly in the citizen's mind his obligations toward the state and community.

This led many citizens to surprisingly generous contributions. It was not uncommon for a citizen to undertake the en-

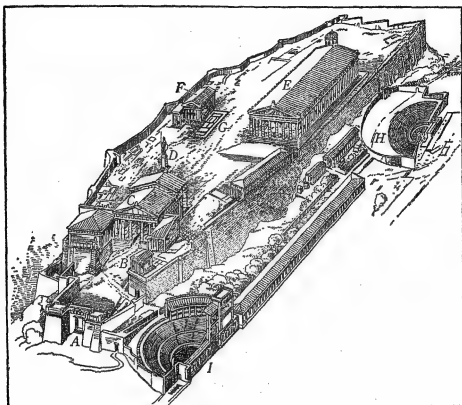


FIG. 120. RESTORATION OF THE ATHENIAN ACROPOLIS

The lower entrance *A* is of Roman date. Beyond it we have on the right the graceful little Temple of Victory *B*, while before us rises the colonnaded entrance building *C* designed by Mnesicles. As we pass through it we stand beside the colossal bronze statue of Athena *D* by Phidias, beyond which at the left is the Erechtheum *F*. To the right, along the southern edge of the hill, is the Parthenon *E*. It looks down upon the theater *H*. The other theater-like building *I*, in the foreground, is a concert hall built by Herodes Atticus, a wealthy citizen, in Roman times. *G* is the foundation of an ancient temple (now destroyed) older than the present Parthenon

tire equipment of a warship except the hull and spars, though this service may have been compulsory. At national festivals a wealthy man would sometimes furnish a costly dinner for all the members of his "tribe." The choruses for public perform-

ATHENS IN THE AGE OF PERICLES

ances, especially at the theater, were organized by private citizens, who paid for the training and for their costumes. We know of one citizen who spent in the voluntary support of feasts and choruses in nine years no less than fourteen thousand dollars, a considerable fortune in those days.

Public festivals maintained by the state also played an important part in the lives of all Athenians. Every spring at the ancient Feast of Dionysus the greatest play-writers each submitted three tragedies and a satyric drama to be played in the theater for a prize given by the state. All Athens streamed to the theater to see them. Many other state festivals, celebrated with music and gayety, filled the year with holidays so numerous that they fell every six or seven days. The great state feast, called the *Panathenæa*, occurred every four years. A brilliant procession made up of the smart young Athenian cavalry, groups of dignified government officials, priests and sacrificial animals, marched with music and rejoicing across the market place, carrying a beautiful new robe embroidered by the women of Athens for the goddess Athena. The procession marched to the Acropolis, where the robe was delivered to the goddess amid splendid sacrifices and impressive ceremonies. Contests in music and in athletic games, war dances and a regatta in the channel off Salamis, served to furnish entertainment for the multitude which flocked to Athens for the great feast.

Art and Literature

Although the first fifteen years of the leadership of Pericles were burdened with the Spartan and Persian wars, the higher life of Athens continued to unfold. Under influences like those we have been discussing, a new vision of the glory of the state, discerned nowhere else in the world before this age, caught the imagination of poet and painter, of sculptor and architect; and not of these alone, but also of the humblest artisan and tradesman, as all classes alike took part in the common life of the community. Music, the drama, art, and architecture were profoundly inspired by this new and exalted

vision of the state, and the citizen found great works of art so inspired thrust into the foreground of his life.

It will aid us in our effort to understand the Athens of this age if in imagination we follow an Athenian citizen and note a few of the noble monuments that met his eye as he went about the new Athens which Pericles was creating. When he wandered into the market place and stood chatting with his friends under the shade of the plane trees, he found at several points colonnaded porches looking out upon the market. One of these, which had been presented to the city by Cimon's family, was called the "Painted Porch"; for the wall behind the columns bore paintings by Polygnotus (an artist from one of the islands belonging to the Delian League), a gift of the painter to the Athenians, depicting their glorious victory at Marathon. Here in splendid panorama was a vision of the heroic devotion of the fathers. In the thick of the fray the citizen might pick out the figure of Themistocles, of Miltiades, of Callimachus (who fell in the battle), of Æschylus the great tragic poet. He can see the host of the fleeing Persians and perhaps hear some old man tell how the brother of Æschylus seized and tried to stop one of the Persian boats drawn up on the beach, and how a desperate Persian raised his ax and slashed off the hand of the brave Greek. Perhaps among the group of eager listeners he notices one questioning the veteran carefully and making full notes of all that he can learn from the graybeard. The questioner is Herodotus, collecting from survivors the tale of the Persian wars for his great history.

Behind the citizen rises a low hill, known as Market Hill, around which are grouped plain, bare government buildings. Here are the assembly rooms of the Areopagus and the Council of Five Hundred. The Council's Committee of Fifty, carrying on the current business of the government, also has its offices here. The citizen recalls how, as a member of this Council, he had lived here for over a month while serving on that committee and had taken his meals in the building before him, at the expense of the state, along with the Athenian victors in the Olympic games and other deserving citizens who were thus pensioned by the government. In spite of

ATHENS IN THE AGE OF PERICLES

the growing sentiment for the glory of the state, these plain buildings, like the Athenian houses, are all built of sun-dried mud brick or, at most, of rough rubble. The idea of great and

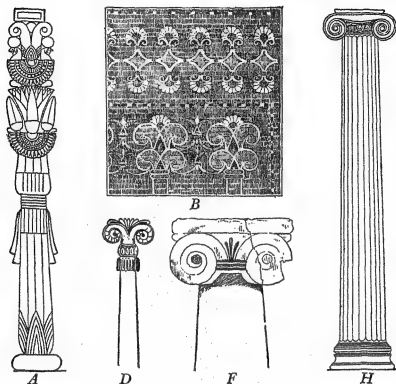


FIG. 121. THE IONIC COLUMN AND ITS ORIENTAL PREDECESSORS

A is a column of wood as used in houses and shrines in Egypt (fifteenth century B.C.); notice at the top of *A* the lily with the ends of the petals rolled over in spirals called *volutes*. *B* is a part of a wall from the throne room of Nebuchadnezzar at Babylon, with beautifully decorative designs in colored glazed brick of the same lily pattern. *D* shows us a capital used in the beginnings of Greek architecture in Asia Minor, with the lily petals forming the volutes rolled further over but still showing its relationship with *A*. This process is carried so far in *F*, a capital dug up on the Acropolis of Athens, that we lose sight of the lily. *H* finally shows us the fully developed Ionic column, in which the volutes hardly resemble any longer the lily from which they came. This column (*H*) is taken from the Temple of Victory on the Acropolis. (After Puchstein)

beautiful buildings for the offices of the government was still unknown in the Mediterranean world of the Periclean age, and no such building yet existed in Europe.

The sentiment toward the state was so mingled with reverence for the gods who protected the state that patriotism was

itself a deeply religious feeling. Hence the great public buildings of Greece were temples and not quarters for the offices of the government. As the citizen turned from the Painted Porch, therefore, he might observe crossing the market many a creaking wagon, heavily loaded with white blocks of marble for a new and still unfinished temple of Theseus, the hero-god who, as the Athenians thought, had once united Attica into a single nation.

Above the citizen towers the height of the Acropolis, about one thousand feet in length—two of our city blocks. There, on its summit, had always been the dwelling place of Athena, whose arm was ever stretched out in protection over her beloved Athens. But for long years after the repulse of the Persians the Acropolis rose smoke-blackened over the rebuilt houses of the city, and no temple of Athena appeared to replace the old building of Pisistratus, which the Persians had burned. Now at last Pericles has undertaken the restoration of the ancient shrines on a scale of magnificence and beauty before unknown anywhere in the Greek world. His sumptuous plans have demanded an expense of about two and a quarter millions of dollars—a sum far exceeding any such public outlay ever heard of among the Greeks. As he passes the Market Hill, where the Areopagus meets, the citizen remembers the discontented mutterings of the old men in this ancient Council as they heard of these vast expenses, and he smiles in satisfaction as he reflects that this unprogressive old body, once so powerful in Athenian affairs, has been deprived of all power to obstruct the will of the people. From here he can also catch a glimpse of the Pnyx, where he has heard Pericles make one eloquent speech after another before the Assembly of the people in support of his new building plans, and the citizen recalls with what enthusiasm the people voted to adopt these plans.

As he looks up at the gleaming marble shafts, he feels that the architectural splendor now crowning the Acropolis is the work of the Athenian *people*, a world of new beauty in the creation of which every Athenian citizen has had a voice. Here before him rise the imposing marble colonnades of the

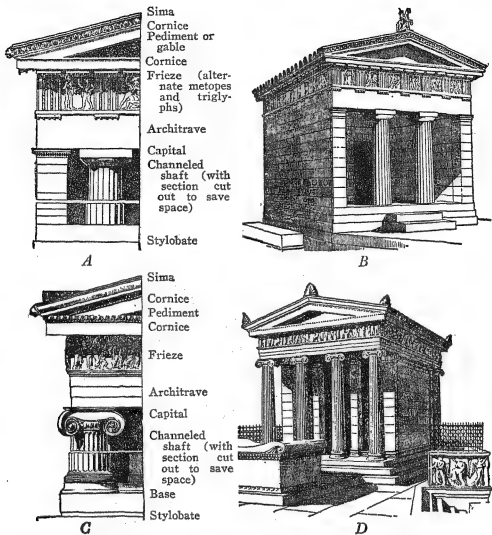


FIG. 122. COMPARATIVE DIAGRAM OF THE TWO LEADING GREEK STYLES OF ARCHITECTURE, THE DORIC (*A* AND *B*) AND THE IONIC (*C* AND *D*)

The little Doric building (*B*) is the treasury of the Athenians at Delphi, containing their offerings of gratitude to Apollo. On the low base at the left side of the building were placed the trophies from the battle of Marathon. Over them on the walls are carved hymns to Apollo with musical notes attached, one of the oldest musical notations surviving. The beautiful Ionic building (*D*) is a restoration of the Temple of Victory on the Athenian Acropolis. Contrast its slender columns with the sturdier shafts of the Doric order, and it will be seen that the Ionic is a more delicate and graceful style. *A* and *C* show details of both styles. (After Luckenbach)

magnificent monumental entrance to the Acropolis. It is still unfinished, and the architect Mnesicles, with a roll of plans under his arm, is perhaps at the moment directing a group of workmen to their task. He is beginning to employ a new style of column, called the Ionic; it is lighter and more ornate than the stately Doric. From the height above, the tinkle of many distant hammers tells where the stonecutters are shaping the marble blocks for the still unfinished Parthenon, a noble temple dedicated to Athenia; and there, too, the people often see Pericles intently inspecting the building, as Phidias the sculptor and Ictinus the architect of the building pace up and down the inclosure, explaining to him the progress of the work. In these wondrous buildings architect and sculptor, working hand in hand, produced marvelously harmonious results.

Phidias is the greatest of the sculptors at Athens. In a long band of carved marble extending entirely around the four sides of the Parthenon, at the top inside the colonnades, Phidias and his pupils have portrayed, as in a glorified vision, the sovereign people of Athens moving in the stately procession of the Panathenaic festival. To be sure, these are not individual portraits of actual Athenian folk, but only types which lived in the exalted vision of the sculptor, and not on the streets of Athens. But such sculpture had never been seen before. How different is the supreme beauty of these perfect human forms from the cruder figures which adorned the temple burned by the Persians. The citizen has seen the shattered fragments of these older works cleared away and covered with rubbish¹ when the architects leveled off the summit of the Acropolis. Inside the new temple gleams the colossal figure of Athena, wrought by the cunning hand of Phidias in gold and ivory. Even from the city below the citizen can descry, touched with bright colors, the heroic figures of the gods with which Phidias has filled the triangular gable ends of the building. Out in the open area behind the colonnaded en-

¹ Until modern times they lay buried under the rubbish on the slope. The excavations of the Greek government have recovered them, and they are now in the Acropolis Museum at Athens.

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trance rises another great work of Phidias, a colossal bronze statue of Athena, seventy feet high as it stands on its tall base. With shield and spear the goddess stands, the gracious protectress of Athens, and the glittering point of her gilded spear can be seen shining like a beacon far across the land, even by the sailors as they round the promontory of Mount Hymettus homeward bound.

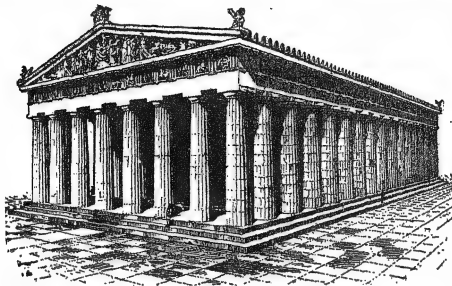


FIG. 123. RESTORATION OF THE PARTHENON AS IT WAS IN THE FIFTH CENTURY B.C.

The restoration shows us the wonderful beauty of the Doric colonnades as they were when they left the hands of the builders. The gable ends each contained a triangular group of sculpture depicting the birth of Athena and her struggle with Poseidon, god of the sea, for possession of Attica. The wonderful frieze of Phidias extended around the building, at the top of the wall, inside the colonnades. (After Thiersch and Michaelis)

In spite of the Sophists these are the gods to whom the faith of the Athenian people still reverently looks up. Have not Athena and these gods raised the power of Athens to the imperial position which she now occupies? Do not all the citizens recall Æschylus' drama "The Persians"? It told the story of the glorious victory of Salamis, and in it the memories of the great deliverance from Persian conquest were enshrined. How that tremendous day of Salamis was made to live again in the imposing picture which the poet's genius brought be-

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fore them, disclosing the mighty purpose of the gods to save Hellas!

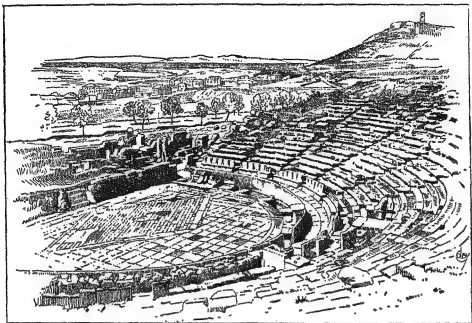


FIG. 124. THE THEATER OF ATHENS

This theater was the center of the growth and development of Greek drama, which began as a part of the celebration of the spring feast of Dionysus. The temple of the god stood here, just at the left. Long before anyone knew of such a thing as a theater, the people gathered to watch the celebration of the god's spring feast at this place, where they formed a circle about the chorus, which narrated in song the stories of the gods. This circle (called the orchestra) was finally marked out permanently, seats of wood for the spectators were erected in a semicircle on one side, but the singing and action all took place in the circle on the level of the ground. On the side opposite the public was a booth, or tent (Greek, *skênê*, "scene"), for the actors, and out of this finally developed the stage. Here we see the circle, or orchestra, with the stage cutting off the back part of the circle. The seats are of stone and accommodated possibly seventeen thousand people. The fine marble seats in the front row were reserved for the leading men of Athens. The old wooden seats were still in use in the days when Æschylus, Sophocles, and Euripides presented their dramas here. The Greek theater was always open to the sky; in Roman times a colonnaded porch across the back of the stage was introduced

As he skirts the sheer precipice of the Acropolis the citizen reaches the theater, where he finds the people are already entering, for the feast of Dionysus has arrived. Only yesterday he and his neighbors received from the state treasury the

ATHENS IN THE AGE OF PERICLES

money for their admission. It is natural that they should feel that the theater and all that is done there belong to the people, and not the less as the citizen looks down upon the orchestra circle and recognizes his friends and neighbors and their sons in the chorus for that day's performance. The seats are of wood, and they occupy the slope at the foot of the Acropolis. Hence they are not elevated on timbers, and there is no danger of their falling and killing the spectators, as they once did when the theater was a temporary structure in the market-place, in the days of the citizen's grandfather. All the citizens have turned out, including some less worthy and intelligent, who do not hesitate to indulge in cat-calls or pelt the actors with food if the play displeases them. The play would seem strange enough to us, for there is little or no scenery, and the actors, who are always men, wear grotesque masks, a survival of old days. The narrative is largely carried on in song by the chorus, but this is varied by the dialogue of the actors, and the whole is not unlike an opera.

A play of Sophocles is on, and the citizen's neighbor in the next seat leans over to tell him how as a lad many years ago he stood on the shore of Salamis, whither his family had fled, and as they looked down upon the destruction of the Persian fleet this same Sophocles, a boy of sixteen, was in the crowd looking on with the rest. How deeply must the events of that tragic day have sunk into the poet's soul! For does he not see the will of the gods in all that happens to men? Does he not celebrate the stern decree of Zeus everywhere hanging over human life, at the same time that he uplifts his audience to adore the splendor of Zeus, however dark the destiny he lays upon men? For Sophocles still believes in the gods, and is no friend of the Sophists. Hence the citizen feels that Sophocles is a veritable voice of the people, exalting the old gods in the new time. Moreover, in place of the former *two*, Sophocles has *three* actors in his plays, a change which makes them more interesting and full of action. Even old Æschylus yielded to this innovation once before he died. Yet too much innovation is also unwelcome to the citizen.

The citizen feels this especially if it is one of the new sen-

sational plays of Euripides which is presented. Euripides is the son of a farmer who lives over on the island of Salamis. He has for some time been presenting plays at the spring competition. He is a friend and companion of the Sophists, and in matters of religion his mind is shadowed with doubts. His new plays are all inwrought with problems and mental struggle regarding the gods, and they have raised a great many questions and doubts which the citizen has never been able to banish from his own mind since he heard them. The citizen determines that he will use all the influence he has to prevent the plays of Euripides from winning the prize. Indeed, Sophocles suits all the old-fashioned folk, and it is very rarely that Euripides has been able to carry off the prize, in spite of his great ability. The citizen feels some anxiety as he realizes that his own son and most of the other young men of his set are enthusiastic admirers of Euripides. They constantly read his plays and talk them over with the Sophists.

The great tragedies were given in the morning, and in the afternoon the people were ready for less serious entertainment, such as the comedy offered. Out of the old-time masques and burlesque frolics of the village communities at country feasts the comedy had developed into a stage performance, with all the uproarious antics of the unbridled comedian. The playwright did not hesitate to introduce the greatest dignitaries of the state. Even Pericles was not spared, and great philosophers like Socrates, or serious-minded writers like Euripides, were shown in absurd caricatures and made irresistibly ridiculous on the stage, while the multitudes of Athens vented their delight in roars of laughter mingled with shouts and cheers. Parodies on great passages of literature, too, were sure of a quick response, so keen was the wit of the Athenians and so widespread the acquaintance of the people with the literature which they had inherited.

When all was over they must wait until the next spring feast of Dionysus before they were privileged to see any more plays. But meantime they were greatly interested in the decision of the jury of citizens awarding prizes for tragedy and for comedy and a bronze tripod to the citizen who had

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equipped and trained the best chorus. Moreover, the interest in drama and the theater continued, for the next competition soon demanded that probably two thousand men and boys of Athens should put all their leisure time into learning their parts written out for them on sheets of papyrus and into training and rehearsals for the various choruses. Thousands of citizens too were reading the old plays that had already been presented.

For now at length books too had come to taken an important place in the life of Athens. Rows of baskets of cylindrical shape held the books which filled the shelves in our Athenian citizen's library. Homer and the works of the old classic poets were now written on long rolls of papyrus, as much as a hundred and fifty or sixty feet in length. To one of these rolls the educated Greek sat down as the Egyptian had so long before been accustomed to do. For lack of good artificial light, reading was necessarily done mostly by day, but studious Greeks also ventured to try their eyes in reading by the dim olive-oil lamp. Besides literary works, all sorts of books of instruction began to appear. The sculptors wrote of their art, and Ictinus produced a book on his design of the Parthenon. There was a large group of books on medicine, bearing the name of Hippocrates. Textbooks on mathematics and rhetoric circulated, and the Athenian housekeeper could even find a cookbook at the bookshop.

In our discussion of the Egyptian Empire we found that a thousand years before the days of Pericles there was a group of gifted men who created at Thebes a grand and imperial city of noble architecture. But that group of great Egyptians was not made up of *citizens*, nor had the multitudes of Thebes any share in government or in the creation of the magnificent city. It was very different in the Athens of Pericles. Here had grown up a whole community of intelligent men, who were the product of the most active interest in the life and government of the community, constantly sharing in its tasks and problems, in daily contact with the greatest works of art in literature, drama, painting, architecture, and sculpture—such

a wonderful community indeed as the ancient world, Greek or oriental, had never seen before.

Not only was it totally different from any that we have found in the ancient Near East, but we see also how very different from the Athens of the old days before the Persian Wars was this imperial Athens of Pericles—throbbing with new life and astir with a thousand questions eagerly discussed at every corner. Keenly awake to the demands of the greater state and the sovereign people, the men of the new Athens were deeply pondering also the duties and privileges of the individual, who felt new and larger visions of himself conflicting with the exactions of the state and the old faith. Troubled by serious doubts, they were, nevertheless, clinging with wistful apprehension to the old gods and the old truths. Under Pericles Athens was becoming, as he desired it should, the teacher of the Greek world. It now remained to be seen whether the *people*, in sovereign control of the state, could guide her wisely and maintain her new power. As we watch the citizens of Athens endeavoring to furnish her with wise and successful guidance, we shall find another and a sadly different side of the life of this wonderful community.

CHAPTER XVI

THE STRUGGLE BETWEEN ATHENS AND SPARTA AND THE FALL OF THE ATHENIAN EMPIRE

The Tyranny of Athens and the Second Peloponnesian War

WHILE Athens under the guiding hand of Pericles had thus made herself the chief center of art and learning in the Greek world, her political situation was becoming somewhat questionable. There were two serious mistakes in the agreement entered into by the members of the Delian League. *First*, both the leadership and the responsibilities were assumed by Athens. As a consequence after a time the Athenian Allies forgot that Athens was protecting them from the neighboring Persians and that she was keeping the seas free and safe. Athens, on the other hand, began to forget that the cities and islands were only her Allies, not her subjects. The Allies soon felt that Athens was becoming too much the leader, while Athens thought she was giving so much more than the other members of the League that she could really assume political control of the allied states. The *second* mistake in the agreement of the Delian League was the failure to come to a definite understanding concerning the right of the states to withdraw from the League. As a result, when some of the island states wished to withdraw, Athens would not permit them to do so. She sent out her war fleet, conquered the rebellious islands, and forced them to pay money tribute instead of contributing ships. Often many of their citizens were driven out and their lands were divided among Athenian settlers. In time a section of the Athenian fleet was on constant duty sailing about in the Ægean and collecting the tribute money by force. These funds were used by Athens as she pleased, and the magnificent buildings of Pericles were paid for out of this tribute.

Besides forcing her allies to remain in the League Athens was finally guilty of interference in the local affairs of the allied peoples. The time came when she would permit none of her allies to have any but a democratic constitution. In addition, the judicial power of the allies was greatly restricted,

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for certain legal cases had to be taken to Athens for trial. As none of these allied peoples were allowed to become Athenian citizens, Athens failed to gain many loyal citizens whose support and devotion she might have otherwise enjoyed. There was no feeling of unity within the League, for the council of representatives from the states of the League, which at first guided its affairs, after a time held no more meetings. In the end Athens gained complete control and governed the allied states as she liked. The Delian League had become an Athenian Empire. Many of the allies revolted or refused to pay tribute. These were reduced to the position of "subject-allies." Some of the seceding states appealed to Sparta for help, and some even went so far as to ask aid of the Persian governors in the near-by provinces. Forty years of so-called Athenian tyranny were to pass by, however, before Sparta would agree to become the champion of the Athenian allies.

While such was the state of affairs within the Athenian Empire, conditions outside were even more serious. The outward splendor of Athens, her commercial prosperity, the visible growth of her power, her not very conciliatory attitude toward her rivals, and the example she offered of the seeming success of triumphant democracy—all these things were causes of jealousy to a backward and conservative military state like Sparta, where most of the citizens were still unable to read, iron money continued in use, and the town remained an open settlement without walls or defenses. Moreover, this feeling of unfriendliness toward Athens was not confined to Sparta but was quite general throughout Greece. The merchants of Corinth found Athenian competition a continuous vexation. and when Athenian possessions in the north Ægean revolted and received support from Corinth and Sparta, the fact that hardly half of the thirty years' term of peace had expired did not prevent the outbreak of war.

It seemed as though all European Greece not included in the Athenian Empire had united against Athens; for Sparta controlled the entire Peloponnesus except Argos, and, north of Attica, Bœotia, led by Thebes, as well as its neighbors on the west, were hostile to Athens. The support of Athens con-

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sisted of the Ægean cities which made up her empire and a few outlying allies of little power. She began the struggle with a large war treasury and a fleet which made her undisputed mistress of the sea. But she could not hope to cope with the land forces of the enemy, which, some thirty thousand strong, had planned to meet in the Isthmus in the spring

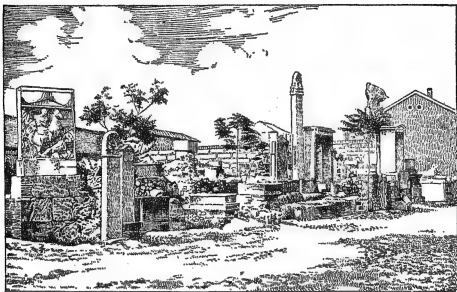


FIG. 125. CEMETERY ALONG THE SACRED WAY OUTSIDE THE DIPYLON GATE AT ATHENS

Both sides of the street are lined for some distance with marble tombstones. The monument at the left shows a brave Athenian youth on horseback, charging the fallen enemy. This lad was one of the many victims of the Peloponnesian Wars

of 431 B.C. Accordingly, Pericles' plan for the war was to throw all the resources of Athens into naval enterprises and make no effort to defend Attica by land. When the Peloponnesian army entered Attica the country communities were directed by Pericles to leave their homes and take refuge in the open markets and squares of Athens, the sanctuaries, and especially between the Long Walls leading to the Piræus. Here they were safe behind the strong defenses of Athens and her port. To offset the devastation of Attica by the Spartan army, all that Athens could do was to organize destructive sea raids and inflict as much damage as possible along the coasts of the

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Peloponnesus or blockade and destroy Corinthian commerce as of old.

The masses of people crowded within the walls of Athens under the most unsanitary conditions exposed the city to disease; a plague, brought in from the Orient, raged with intermissions for several seasons. It carried off probably a third of the population, and from this unforeseen disaster Athens never recovered. Constantly under arms for the defense of the walls, deprived of any opportunity to strike the enemy, forced to sit still and see their land ravaged, the citizens at last broke out in discontent.

Even before the beginning of the Peloponnesian Wars Pericles had been attacked indirectly by his political opponents. He was a thoroughly modern man, associated openly with Sophists, and very evidently approved of their teachings. It may have been that some of these intellectuals influenced his policies—formed a sort of "brain trust." They were, of course, greatly disliked, and the association provided a means whereby Pericles might be discredited before the people. Various ones of his intimates were summoned to trial for irreligion or other misdemeanors. Anaxagoras (p. 347), for instance, was prosecuted for having said that the sun was a "glowing mass of stone" and the moon of earthly nature; for he had thereby denied that the sun and moon were divine beings. The scientist was condemned for his infidelity, and, in spite of all Pericles could do, was obliged to flee from Athens. At the same time a popular attack on the honesty of Pericles' friend Phidias, the great sculptor, resulted in his being thrown into prison, where he died. Finally Pericles himself lost control, was tried for misappropriation of funds, and was fined.

The absence of his powerful leadership was at once felt by the people, for there was no one to take his place, although a swarm of small politicians were contending for control of the Assembly. Realizing their helplessness the people soon turned to Pericles again and elected him strategos. But the great days of "the Olympian"¹ were over. His two sons died

¹ So Pericles was nicknamed in the comedies.

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of the plague. Then he was himself stricken with it and died soon after his return to power (429 B.C.). Able statesman that he was, he had left Athens with a system of government which did not provide for the continuation of such leadership as he had furnished, and without such leadership the Athenian Empire was doomed.

Men of the prosperous manufacturing class now came to the fore. They possessed neither the high station in life, the ability as statesmen, nor the qualities of leadership to win the confidence and respect of the people. Moreover, these new leaders were not soldiers and could not command the fleet or the army as Pericles had done. The most notable exception was Alcibiades, a brilliant young man, who was a relative and ward of Pericles, and who might have become the savior of Athens and of Greece. As it happened, however, this young leader was more largely responsible than anyone else for the destruction of the Athenian Empire and the downfall of Greece.

Lacking the steadying hand of a statesman whose well-formed plans and continuous policy might furnish a firm and guiding influence, the management of Athenian affairs fell into confusion. Wavering and changeableness were rarely interrupted by any display of stability, firmness, and wisdom; the leaders drifted from one policy to another, and usually from bad to worse. The youthful Aristophanes pictured the rudderless condition of the ship of state in one clever comedy after another, in which he ridiculed in irresistible satire the pretense to statesmanship of such "men of the people" as Cleon the tanner.

A typical example of the ill-considered actions of the Assembly was their treatment of the revolting citizens of Mitylene. When the men of Mitylene were finally subdued, the Assembly on the Pnyx voted that they should all be put to death, and a ship departed with these orders. It was with great difficulty that a more moderate group in the Assembly secured a rehearing of the question and succeeded in inducing the people to modify their barbarous action to the condemnation and execution of the ringleaders only. A second ship then

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overtook the first barely in time to save from death the entire body of the citizens of Mitylene.

In spite of such revolts Athenian naval supremacy continued; but as the war dragged on, the payment of army and fleet reduced Athenian funds to a very low state. Cleon the tanner was a man of much energy and a good deal of financial ability. He succeeded in having a direct tax levied on property in Attica, and, later on, the tribute of the Allies was raised. But having always been a manufacturer, he lacked military experience. For years the operations on both sides were in most cases utterly insignificant. This is best seen in Cleon's siege and capture of *four hundred* Spartans on one of the islands on the west coast of Greece—a disaster which made a great impression and, in view of some other reverses, led the Spartans to sue for peace! Later, in an absurdly mismanaged expedition on the northern coast of the Ægean, Cleon lost his army of fifteen hundred men and his own life.

The attack of Sparta and her allies on Athens did not succeed in breaking up the Athenian Empire. It was the devastation wrought by the plague which had seriously affected Athens. The whole Greek world was, however, demoralized and weakened. The contest had in it no longer the inspiration of a noble struggle such as the Greeks had maintained against Persia. Unprecedented brutality, like that at first adopted toward Mitylene, gave the struggle a savagery and a lack of respect for the enemy which completely obscured all finer issues, if there were any such involved in the war. With Cleon gone, Athenian leadership was assumed by Nicias, an old-fashioned conservative who had made his money by hiring out slaves to work in the mines. After some years of indecisive warfare Nicias arranged a peace (421 B.C.) to be kept for fifty years. Each contestant agreed to give up all new conquests and to retain only old possessions or subject cities.

Third Peloponnesian War and Destruction of the Athenian Empire

Meantime serious difficulties arose in carrying out the conditions of the peace. One of the northern subject cities of

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Athens which had gone over to Sparta refused to return to Athenian allegiance. Athens took the questionable ground that Sparta should force the unwilling city to obey the terms of peace. It was at this juncture that Athens especially needed

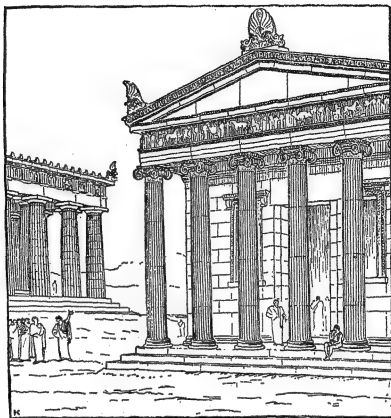


FIG. 126. THE EAST ENTRANCE OF THE ERECHTHEUM, LOOKING TOWARD THE NORTHWEST CORNER OF THE PARTHENON

The contrast between the Doric and Ionic style of architecture is here interestingly emphasized. In spite of adverse circumstances the Athenians were able to complete the Erechtheum during the Third Peloponnesian War. The suggestion has been made that it was a relief works project.

(After Krischen in Schede, *The Acropolis of Athens*, p. 102)

such guidance as a statesman like Pericles could have furnished. She was obliged to depend upon the uncertain Nicias and the energetic but unprincipled Alcibiades.

Nicias continued to urge a conciliatory attitude toward Sparta, but he failed of election as strategos. On the other hand, the gifted and reckless Alcibiades, seeing a great oppor-

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tunity for a brilliant career, did all that he could to excite the war party in Athens. He was elected strategos and, in spite of the fact that troubles at home had forced Sparta into a treaty of alliance with Athens, Alcibiades was able to carry the Assembly with him. He then involved Athens in an alliance with Argos against Sparta. In this way Attica, exhausted with plague and ten years of warfare, was enticed into a life-and-death struggle which was to prove final.

Several years of ill-planned military and naval operations followed the fruitless peace of Nicias. The Spartans did not at once respond with hostilities and sent no army into Attica. Alcibiades at length persuaded the Athenians to plan a great joint expedition of army and navy against Sicily, where the mighty city of Syracuse, founded as a colony of Corinth, was leading in the oppression of certain western cities in alliance with Athens. The Athenians placed Alcibiades and Nicias in command of the expedition.

Just as the fleet was about to sail, certain sacred images in Athens were impiously mutilated, and the deed was attributed to Alcibiades. In spite of his demand for an immediate trial, the Athenians postponed the case until his return from Sicily. When the fleet reached Italy, however, the Athenian people, with their usual inability to follow any consistent plan and also desiring to take Alcibiades at a great disadvantage, suddenly recalled him for trial. This procedure not only deprived the expedition of its only able leader but also gave Alcibiades an opportunity to desert to the Spartans, which he promptly did. His advice to the Spartans now proved fatal to the Athenians.

The appearance of the huge Athenian fleet off their coast struck dismay into the hearts of the Syracusans, but Nicias entirely failed to see the importance of immediate attack before the Syracusans could recover and make preparations for the defense of their city. He wasted the early days of the campaign in ill-planned maneuvers, winning only a barren victory over the Syracusan land forces. When Nicias was finally induced by the general second in command to begin the siege

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of the city, courage had returned to the Syracusans and their defense was well organized.

The Athenians now built a siege wall behind Syracuse nearly across the point of land on which the city was situated, in order to cut it entirely off from the outside world. The spirit of the Syracusans was much depressed, and surrender seemed not far off. Just at this point Gylippus, a Spartan leader, and his troops, sent by the advice of Alcibiades, succeeded in passing the Athenian lines and gained entrance to the city. The courage of the Syracusans was at once restored. The Athenians were thrown upon the defensive. Meantime the Syracusans had also organized a fleet. The Athenian fleet had entered the harbor, and in these narrow quarters they were unable to maneuver or to take advantage of their superior seamanship. After some Athenian success at first, the fleet of Syracuse was victorious.

There was now no prospect of the capture of the city, and Nicias would have withdrawn, but the leaders at home would not allow it. In spite of renewed Spartan invasion, the blinded democratic leaders sent out another fleet and more land forces to reinforce Nicias. No Greek state had ever mustered such power and sent it far across the waters. All Greece watched the spectacle with amazement. A night assault by the reinforced Athenians failed with large losses, and the position of the whole expedition at once became a dangerous one.

With disaster staring them in the face there was nothing for the Athenians to do but withdraw. But just at this point, an eclipse of the moon occurred, and the superstitious Nicias insisted on waiting for another more favorable moon. This month's delay was fatal to the Athenians. The Syracusans blockaded the channel to the sea and completely shut up the Athenian fleet within the harbor, so that an attempt to break through and escape failed disastrously. The desperate Athenian army, abandoning sick and wounded, endeavored to escape into the interior, but was overtaken and forced to surrender. The Syracusans treated the captured Athenians with savage barbarity. It is said that, after executing the commanding generals, they took the prisoners, seven thousand in num-

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ber, and sold them into slavery or threw them into the stone quarries of the city, where most of them miserably perished. Thus the Athenian expedition was completely destroyed (413 B.C.). This disaster, together with the earlier ravages of the plague, brought Athens near the end of her resources.

Sparta, seemingly unwilling to break the peace of Nicias, had at first stood aloof and had not invaded Attica. But, seeing the unprotected condition of Athens after the dispatch of the Sicilian expedition, Sparta again sent troops into Attica and, upon the advice of Alcibiades, occupied the town of Decelea¹ almost within sight of Athens. Here the Spartans established a permanent fort held by a strong garrison, and thus placed Athens in a state of perpetual siege. All agriculture ceased, and the Athenians lived on imported grain. The farmers could not get to their cattle which had been kept during the war on the island of Eubœa. Access to the silver mines at Laurium was cut off. The people now understood the folly of having sent away on a distant expedition the ships and the men that should have been kept at home to repel the attacks of a powerful and still uncrippled foe.

After these disasters the Athenian Empire began to show signs of breaking up. The failure of the democracy in the management of the war enabled the nobles to denounce popular rule as unsuccessful. The nobles regained power for a time; violence and bloodshed within were added to the dangerous assaults of the enemy from without. The finances were in a desperate condition. The tribute, already raised to the breaking point, was abolished and a customs duty of five per cent was levied on all goods exported or imported. The plan was a success and brought in a larger income than the tribute. But the measure did not unite nor quiet the discontented communities of which the Empire was made up. One after another they fell away. Spartan warships sailed about in the Ægean, aiding the rebels, who had of course dared to revolt only on promise of such assistance from Sparta.

To add to the Athenian distress, the powerful Persian satrap

¹ On this account the war with Sparta which now followed, lasting nine years (from 413 to 404 B.C.), is often called the Decelean War.

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in western Asia Minor was supporting the Spartan fleet with money. Indeed, both Athens and Sparta had long been negotiating with Persia for aid, and Sparta had recognized Persian rule over the Greek cities of Asia. The Greek islands and the cities of Asia Minor which had once united in the Delian League with Athens to throw off Persian rule were now combining with Sparta and Persia against Athens. Thus the former union of the Greeks in a heroic struggle against the Asiatic enemy had given way to a disgraceful scramble for Persian support and favor.

Meantime Alcibiades, under the protection of the Persian satrap, had himself encouraged the revolters against Athens, hoping that her distress would finally oblige her to recall him and seek his aid. He was not disappointed. The small Athenian fleet, which was stationed at Samos, called upon Alcibiades for help, and made him a general without any authorization from Athens. In several conflicts, chiefly through the skill of Alcibiades, the Peloponnesian fleet was finally completely destroyed, and Athens regained the command of the sea.

Sparta now made offers of peace, but Alcibiades skillfully used the war sentiment in the fleet against their acceptance, and the democratic leaders in power at Athens also refused to make peace. Alcibiades was then invited back to Athens. He entered the city at the head of a triumphal procession, and was immediately elected commander-in-chief. He was solemnly purified from the religious curse which had rested upon him; and his fortune, which had been confiscated, was returned to him.

It now needed only the abilities of such a leader as Alcibiades to accomplish the union of the distracted Greek states and the foundation of a great Greek nation. At this supreme moment, however, Alcibiades lacked the courage to seize the government, and the opportunity never returned again. Shortly thereafter a slight defeat, inflicted on a part of his fleet when he was not present, cost him the favor of the fickle Athenians. When they failed to reelect him as commander he retired to a castle which he had kept in readiness on the

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Hellespont. He never saw his native land again and died in exile, the victim of a Persian dagger.

The Athenians had now lost their ablest leader, but they continued the war on the sea as best they could. They won another important victory over a new Peloponnesian fleet on the coast of Asia Minor, by the little islands of Arginusæ (406 B.C.). As the battle ended a storm arose which prevented the commanders from saving the Athenian survivors clinging to the wreckage. For this accident the Athenian generals were accused of criminal neglect before the Assembly and condemned to death. In spite of all that could be done, six of the eight naval commanders were executed, including the young Pericles, a son of the great statesman. The other two commanders had been wise enough to flee from such justice as they might expect at the hands of the Athenian democracy.

Athens now suffered worse than ever before for lack of competent commanders. The fleet, numbering about one hundred and eighty triremes, was placed in command of a group of officers, each of whom was to lead for a day at a time. The democratic leaders who had made this absurd arrangement watched the fleet sail out to continue a war which they themselves were prolonging by again refusing Spartan proffers of peace. For several days in succession the Athenians sailed out from their station near the river called Ægospotami on the Hellespont, and offered battle to the Peloponnesian fleet lying in a neighboring harbor. But the Peloponnesians refused battle. On their return from these maneuvers each day, the Athenians left their ships along the beach and themselves went ashore. Alcibiades from his neighboring castle, where he still was, came down and pointed out to the Athenian commanders the great danger they ran in leaving the fleet in this condition so near the enemy. His advice received no attention. The able Spartan, Lysander, the commander of the Peloponnesian fleet, seeing this daily procedure, waited until the Athenians had gone ashore and left their ships as usual. Then, sailing over, he surprised and captured practically the whole Athenian fleet (405 B.C.).

At last, twenty-seven years after Pericles had provoked the

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war with Sparta, the resources of Athens were exhausted. Not a man slept on the night when the terrible news of final ruin reached Athens. It was soon confirmed by the appearance of Lysander's fleet blockading the Piræus. The grain ships from the Black Sea could no longer reach the port of Athens. The Spartan king pitched his camp in the grove of the Academy and called on the city to surrender. For some months the stubborn democratic leaders refused to accept terms of peace which meant the complete destruction of Athenian power. But the pinch of hunger finally convinced the Assembly, and the city surrendered. The Long Walls and the fortifications of the Piræus were torn down, the remnant of the fleet was handed over to Sparta, all foreign possessions were given up, and Athens was forced to enter the Spartan League. These hard conditions saved the city from the complete destruction demanded by Corinth. Thus the century which had begun so gloriously for Athens with the repulse of Persia, the century which under the leadership of such men as Themistocles and Pericles had seen her rise to supremacy in all that was best and noblest in Greek life, closed with the annihilation of the Athenian Empire (404 B.C.).

CHAPTER XVII

THE FINAL CONFLICTS AMONG THE GREEK STATES

Spartan Leadership and the Decline of Democracy

THE long struggle of Athens for the political leadership of the Greek world had ignominiously failed. It now remained to be seen whether her victorious rival, Sparta, was any better suited to undertake such leadership. No nation which devotes itself exclusively to the development of military power, as Sparta had done, is fitted to control successfully the affairs of its neighbors. Military garrisons commanded by Spartan officers were now placed in many of the Greek cities, and Spartan control was maintained in a much more offensive form that had been the old tyranny of Athens.

By such violent means Sparta was able to repress the democracies which had everywhere been hostile to her. In each city the Spartans established and supported by military force the rule of a small group of men from the noble or upper class. This group was called an *oligarchy*, from a Greek term meaning "rule of a few." The oligarchs were guilty of the worst excesses, murdering and banishing their political opponents and confiscating their fortunes. When the people regained power, they retaliated in the same way and drove the oligarchs from the city. As this kind of conflict went on in Athens, both parties banished so many that there was always a large number of the leading Athenian citizens living in exile. From their foreign homes they plotted against their banishers and formed a constant danger from abroad.

In spite of the failure of oligarchy, thoughtful men everywhere regarded popular rule also as an open failure. The splendid achievements of citizenship under Pericles must not blind us to the weaknesses of Athenian democracy. Some of these we have already seen in following the course of the Peloponnesian Wars; but the same weaknesses were evident in the people's control of the internal affairs of Athens. Let us examine some of the important matters in which popular control had failed and continued to fail.

THE FINAL CONFLICTS AMONG THE GREEK STATES

Nowhere were the mistakes of democracy more evident than in the Athenian law courts. The payment of the large citizen-juries often exhausted the treasury. When there was no money in the treasury with which to pay the juries, the jurymen, who preferred such service to hard work, found it very easy to fill the treasury again by fining any accused citizen brought before them, whether he was guilty or innocent. More than one lawyer of the time urged the court to confiscate the fortune of an accused citizen, in order that the jurymen to whom the lawyer was talking might thus receive their pay. It became a profitable trade to bring accusations and suits against wealthy men on all sorts of trumped-up charges. A man thus threatened usually preferred to buy off his accusers, in order to avoid going before five hundred poor and ignorant jurors.

In the days of Solon we remember that the rule of the *upper* classes over the lower was so oppressive that it almost resulted in the destruction of the state. In the course of less than two hundred years the *lower* classes had gained complete control; and their rule, as we have just seen, became so corruptly oppressive toward the upper classes that the final situation was again one-sided class rule, as bad as any that Athens had ever experienced. To Athenian misfortunes in foreign wars were thus added the constant violence of weakening inner struggles between classes.

Another weakness of popular rule was its unwise financial policy, which continually exhausted the treasury of Athens. Her empty treasury was due to a number of causes, chiefly three: first, the payment of large numbers of citizens for services to the state, especially the thousands of citizen-jurors; second, the payment to all citizens of "show-money" (p. 359); and third, the long-continued expenses and losses of war.

To these we might add the expensive means of collecting taxes employed by both parties. Unlike the oriental governments, no Greek state possessed officials to undertake the task of collecting taxes. It therefore sold its tax claims to the highest bidder, who then had the right to collect the taxes. In order to secure the large sums necessary for making such bids, a number of wealthy men would form themselves into a com-

SPARTAN LEADERSHIP; DECLINE OF DEMOCRACY

pany. These companies, by secretly combining, gained a monopoly in the business of tax collecting. Their bid was always far less than the amount of the tax claims to be collected. Thus the people paid far more taxes than the state received from the collectors, into whose pockets the difference went. Consequently, the rate of taxation at Athens was now high, being at least from one to two per cent of a man's fortune and sometimes higher.

The Athenians had early begun to use the treasure which had accumulated in the temple of Athena. The obligation to pay back this borrowed treasure was engraved upon a stone tablet set up on the Acropolis. To this day the surviving fragments of this broken stone bear witness to the unpaid debt to Athena and the bankruptcy of Athens. After the long struggle between Athens and Sparta was over, all the Greek states were practically bankrupt. An admiral or a general of this time often found himself facing the enemy without the money to pay his forces or to feed them. At the same time, if he failed in his campaign he would be punished for his failure by the democracy at home. There were times when the Athenian courts ceased to hold any sessions, for lack of funds to pay the citizen-juries, and a man with an important lawsuit on his hands could not get it tried.

Under these circumstances the Mediterranean states for the first time began to study the methods and theory of raising money for government expenses. A beginning was thus made in the science of national finance and political economy. Nevertheless, the method of collection of the taxes continued to be that of "farming" out the undertaking to the highest bidder. In this matter the Near East still remained far in advance of the northern Mediterranean states. From now on the control of the finances of a nation required special training, and it became more difficult for the average citizen without experience to manage the financial offices of the government.

Notwithstanding the great losses in property and in men during the long Peloponnesian Wars, Athens at length began to recover herself. The farms of Attica had been laid waste so often by the Spartan armies that agriculture never wholly re-

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covered its former prosperity. There was a tendency among farmers to sell their land and to undertake some form of manufacturing in the city. This was a natural thing to do, for the industries of Athens offered attractive opportunities to make a fortune. At the same time, men who had already gained wealth in manufactures bought one farm after another. This was a process which would finally concentrate the lands of Attica in the hands of a few large city landlords who were not farmers but worked their great estates (each made up of many farms) with slaves under superintendents. The land-owning farmers who worked their own lands and lived on them tended to disappear. In their place the great estates common in neighboring Asia Minor under the Persians were also appearing among the Greeks.

Athens was still the leading business center and the greatest city in the Mediterranean world. While manufacturing business was not often conducted by companies, groups of wealthy men, as we have seen, united to furnish the large sums necessary to bid for the contract to collect the taxes. Such combinations formed one of the evils of Athenian business life, as they have sometimes done in our own time. Other men combined their capital to form the first banks in Greece. The Greeks no longer left their accumulated money in a temple treasury for safe-keeping, but gave it to some bank that it might be loaned out, used in business, and earn interest. Athens thus became the financial center of the ancient world, as New York and London are today, and her bankers became the proverbially wealthy men of the time. The most successful among them was Pasion, a former slave, who had been able to purchase his liberty because of his great business ability.

As the banking system resulted in keeping more money in circulation the old increase in prices went on, and the expenses for government were consequently higher; but the democracy continued to pay itself vast sums for jury service and show-money. There was a freer use of money in private life among the well-to-do classes. The houses of such people began to display rooms with painted wall decorations and adorned with rugs and hangings. An orator of the time condemns

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such luxurious houses, which he says were unknown in the days of Miltiades and the Persian War, just as some criticize our own modern fine houses and contrast them with the simplicity of George Washington and Revolutionary days.

Men were now becoming more and more interested in their own careers, and they were no longer so devoted to the state as formerly. This was especially true in the matter of military service. Except in Sparta, a Greek had heretofore left his occupation for a brief space to bear arms for a single short campaign, and then returned to his occupation. Such men made up a citizen militia, no more devoted to arms than our own modern militia. But the long Peloponnesian Wars had kept large numbers of Greeks so long under arms that many of them permanently adopted military life and became professional soldiers serving for pay wherever they could find opportunity. There were few unoccupied lands to which a young Greek could migrate as in the colonizing age; and Persia blocked all such enterprises in the East. The Greek youths who could find no opportunities at home were therefore enlisting as soldiers in Egypt, in Asia Minor, and in Persia, and the best young blood of Greece was being spent to strengthen foreign states instead of building up the power of the Greeks.

More than ten thousand of these Greek mercenaries were employed by the Persian prince Cyrus in 401 B.C. when he determined to seize the throne of Persia from his brother Artaxerxes. Cyrus led his troops from Sardes southeastward entirely across Asia Minor to the Euphrates, and down the river almost to Babylon. Here they met the Persian army. In the battle that followed Cyrus was killed and his Asiatic forces fled from the field; but the Greek contingent had been able to rout the left wing of the Persian army. As usual the Greeks pushed on in pursuit, and when they returned they found themselves in a precarious situation. There they were leaderless, in a strange country a thousand miles from home, and surrounded by enemies. Their captains were enticed into the Persian camp and made captive. The Greeks promptly chose new commanders, one of whom was Xenophon, an adventurous young Athenian; and instead of surrendering they

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began the long retreat homeward. They decided to march northward up the Tigris and, striking off through Kurdistan and Armenia, make for one of the Greek colonies on the southern shores of the Black Sea. At first they were kept on the run by Persian troops who followed them until they reached the borders of the Empire. Then the hill tribes began to worry the Greeks with surprise attacks. After months of fighting in dangerous mountain passes and struggling over snow-covered heights, the survivors of the immortal "Ten Thousand" finally reached the Greek town of Trapezus.

Of this extraordinary raid into the Persian Empire Xenophon has left a picturesque account called the *Anabasis* ("up-going"), one of the great books which have descended to us from ancient times. As he explained the military operations involved, the book became one of the treatises on military science which began to appear at this time. Military leaders were discussing the theory of operations in the field, methods of strategy, and the best kinds of weapons. Even Euripides, in his tragedy of *Hercules*, pictured the comparative effectiveness of bow and spear. Xenophon tells of an officer of Cyrus who divided his men into two parties and armed one party with clods and the other with clubs. After the two parties had fought it out, all agreed that the club in the hand at close quarters was more effective than missiles (that is, the clods) hurled from a distance. This was to demonstrate the effectiveness of the spear at close quarters over the arrows of distant archers.

We recall that in Pericles' time the Spartans made no attempt to attack the walls of Athens, because the Greeks at that time knew nothing about methods of attacking fortifications. The Phœnician Carthaginians, however, had carried the Assyrian siege devices to the West, where the western Greeks had now learned to use them in Sicily. From Sicily the use of battering-rams, movable towers, and the like was carried to Greece itself, and against attack with such equipment Athens would no longer have been safe. The Mediterranean, which had so long ago received the arts of peace from the Near East, was now learning to use war machinery from the same

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source. Larger warships were also being constructed, some having as many as five banks of oars; and the old triremes with three banks could no longer stand against the powerful new ships. All such equipment made war more expensive than before.

The remarkable feat of Xenophon's Ten Thousand finally influenced the Spartans to abandon the policy of accepting Persian gold, and to undertake conquest in Persian territory in Asia Minor. The Spartans, therefore, hired the surviving two-thirds of the Ten Thousand to assist in this undertaking. The rule of Sparta had caused such dissatisfaction, however, that her victories in Asia Minor were offset by revolts in Greece. In one of these Lysander was killed. The outcome of the rebellions was a league of

Athens and Thebes against Sparta. Even Corinth, the old-time enemy of Athens, joined this league, and Argos also came in. Behind this combination was Persia, whose agents had brought it about in order to weaken Sparta. It was one of the ironies of the whole deplorable situation that a fleet of Athens made common cause with the Persians and helped

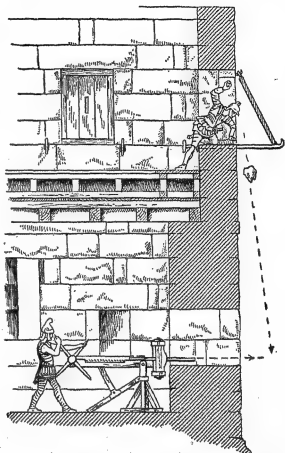


FIG. 127. RECONSTRUCTION OF A TOWER WALL AT HERACLEA-ON-LATMUS, SHOWING PROBABLE METHOD OF SIEGE DEFENSE

The magnificent ruins of this late Greek fortress have been splendidly published and reconstructions (as above) made by Fritz Krischen in *Milet*, Bd. III, Heft 2

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to fasten Persian despotism on the Greek cities of Asia. The Greeks had learned nothing by their long and unhappy experience of fruitless fighting, and thus began an eight years' struggle, called the Corinthian War (395-387 B.C.). The Athenians had been able to rebuild a fleet, with which they now destroyed the fleet of Sparta. They were then in a position to erect the Long Walls again.

At length the Persians began to fear lest Athens should again be strong enough to endanger Persian control in Asia Minor. The Spartans, therefore, found it easy to arrange a peace with Persia. The Greek states fighting Sparta were equally willing to come to terms, and when peace was at last established in Greece, it was under the humiliating terms of a treaty accepted by Hellas at the hands of the Persian king. It is known as the King's Peace (387 B.C.). It did not end the leadership of Sparta over the Greek states, and the Greek cities of Asia Minor were shamefully abandoned to Persia. The period following the King's Peace brought only added discontent with Sparta's illegal and tyrannical control, and no solution of the problem of how the Greek states were to establish satisfactory national relations among themselves.

The Fall of Sparta and the Leadership of Thebes

For twenty-five years since the last Peloponnesian War, the Spartans had been endeavoring to maintain control of the Greek world, but in the end the Spartans were more hated than Athens had ever been. At length a group of fearless and patriotic citizens at Thebes succeeded in slaying the oligarchs, the Spartan garrison surrendered and a democracy was set up, which gained the leadership of all Boeotia. At the same time Athens, which on the whole had been greatly strengthened by the terms of the King's Peace, was able to begin the formation of a second naval alliance like the original league from which the Athenian Empire had sprung. The combination (378 B.C.) included Thebes and so many of the other Greek cities that Sparta was greatly disturbed. The Spartans met disaster on land, and when this was followed by the defeat of their fleet by Athens, they were ready for peace.

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To arrange this peace all the Greek states met at Sparta. As such meetings gave them experience in the united management of their common affairs for the welfare of all, Spartan leadership might have held the Greek states together, and by giving them all a voice in the control of Hellas, Sparta might still have finally united the Greeks into a great nation. But when the conditions of peace were agreed upon, the Spartans refused to allow Thebes to speak for the whole of Bœotia. The Thebans would not enter the compact on any other terms, and the peace was concluded without them. This left Sparta and Thebes still in a state of war.

All Greece now expected to see the Thebans crushed by the heavy Spartan phalanx, which had so long proved irresistible. The Spartan plan of battle hitherto followed by all commanders consisted in making the phalanx of the right wing very heavy and massive, by arraying it many warriors deep. The effect was that of a heavy mass play in American football, only we must picture the phalanx as carrying out the operation on a large scale. Having broken through at the first onset, the victorious phalanx could then cut down singly the scattered soldiers who had given way before them.

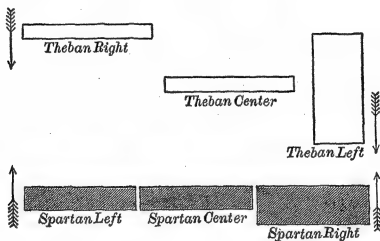
The Spartans had, as it were, but one "play" in their list; but they were accustomed to see it automatically successful. As the Theban commander Epaminondas knew in advance the only "play" which the Spartans had ever used, he devised an altogether novel arrangement of his troops. Accordingly he drew up his line so that it was not parallel with that of the Spartans, his right wing being much farther from the Spartan line than his left. At the same time he massed his troops on his left wing, which he made fifty shields deep, to meet the shock of the heavy Spartan right wing.

The battle took place at Leuctra, in southern Bœotia. As the lines moved into battle the massive Theban left wing, being farthest advanced, met the Spartan line first and was at first engaged alone. Its onset proved so heavy that the Spartan right opposing it was soon crushed, and the rest of the Spartan line also gave way as the Theban center and right came into action. Over half of the Spartans engaged were slain and with

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them their king. The long-invincible Spartan army was at last defeated, and the charm of Spartan prestige was finally broken. After more than thirty years of leadership Spartan power was ended (371 B.C.).

A third Greek state was now victorious on land, and it remained to be seen whether Thebes could accomplish what Athens and Sparta had failed in doing. Epaminondas at once made a fatal mistake in policy. He followed the example of Sparta, and by accepting Persian gold he was able to build a



PLAN OF THE BATTLE OF LEUCTRA (371 B.C.)

The Theban battle line really presents an *oblique front*, an extraordinary military invention, which was adopted by Philip of Macedon and then employed by Alexander the Great in his three greatest victories over the Persians

fleet and thus oppose successfully the naval power of Athens. If he had summoned all the Greeks to follow him in fighting Persia instead of depending on Persian financial aid, all Greece would have been glad to throw off Persian bondage under the King's Peace, and Epaminondas might have founded an enthusiastically united nation of the Greeks. Depending on force rather than an attractive policy, Theban supremacy was based upon the genius of a single man; and when Epaminondas fell in a final battle with Sparta at Mantinea (362 B.C.), the power of Thebes by land and sea collapsed. Thus, the only powerful Greek states which might have developed a federation of the Hellenic world having crushed each other, Hellas was ready

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to fall helplessly before a conqueror from the outside. The Greek world, whose civilization was everywhere supreme, was politically prostrate and helpless.

It was less than two generations since the death of Pericles, and there were still old men living who had seen him in their childhood days. We have been following the *political* fortunes of Athens, Sparta, and Thebes during these two generations, but our narrative has been very far from telling the whole story. For in spite of their political decline during the two generations since Pericles, the Greeks, and especially the Athenians, had been achieving things in their higher life, in art, architecture, literature, and thought, which made this period perhaps the greatest in the history of man. To these achievements since the death of Pericles we must now turn back.

CHAPTER XVIII

THE HIGHER LIFE OF THE GREEKS FROM THE DEATH OF PERICLES TO THE FALL OF THE GREEK STATES

Architecture, Sculpture, and Painting

WHEN the long wars and the demands of the democracy had swallowed up the wealth of Athens, the great and splendid works of the Age of Pericles were no longer possible. Instead Athens was obliged to rebuild her fortifications, erect war arsenals, and build sheds for her battleships. It is true the old temporary wooden seats of the theater were at this time replaced by a permanent structure of stone. Generally speaking, however, the artists of Athens were no longer employed by the state, but were producing works of art for private buyers.

The last state temple erected by the Athenian democracy of the fifth century was the Erechtheum. It had been completed during the unhappy days of the Third Peloponnesian War. Because of the richness and beauty of the carved ornamental designs found throughout the building, the Erechtheum ranks as one of the most beautiful of the Greek temples. The general architectural arrangement, however, seems to lack coherence. It has been thought by some scholars that the architect was obliged to plan it so in order to include in one building various old shrines. The most photographed and best known portion of the Erechtheum is the exquisite porch at the southwest corner. Here the roof is not borne by columns, but supported by lovely marble figures of Athenian maidens. The Ionic columns of the eastern and northern porticoes are decorated around the neck with bands of ornamental designs consisting of alternate palmette and lotus flowers. These ornamental neckbands below the elaborately carved Ionic capitals of the Erechtheum may have influenced the development of a new style of column which, from now on, was used frequently by the Greeks, and profusely by the Romans.

Egyptian architects, as we remember, had long before crowned their columns with a capital representing growing

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flowers or palm-tree tops. This seems to have suggested to the Greek architects a similar use for the beautiful acanthus plant. They designed, therefore, a capital adorned with rings or rows of acanthus leaves. This new capital was richer and more sumptuous than the simpler Doric and Ionic forms. Columns with these more ornate capitals are called Corinthian. The oldest known Corinthian column is the one discovered in the temple of Apollo at Bassae in Arcadia. During the fourth century B.C. temples with Corinthian columns were built at Delphi and various places of the Peloponnesus.

While Athens no longer possessed the means to erect great state temples, not all Greek states were so financially exhausted. Many new temples, chiefly in the Doric style, were erected on the Peloponnesian pen-

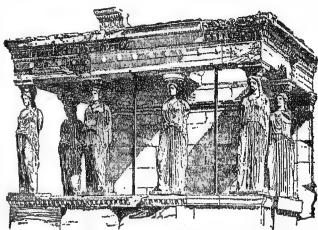


FIG. 128. THE PORCH OF THE MAIDENS AT THE SOUTHWEST CORNER OF THE ERECHTHEUM

insula. Some of these were the work of the sculptor-architects Scopas and Polyclitus. Architecture in the Ionic style was at the same time being further developed in the cities of Asia Minor. Of outstanding importance among the architects of Asia Minor was Pythius, who designed and built not only temples, but also the Mausoleum at Halicarnassus. This great marble tomb was erected for King Mausolus of Caria. It was said that his widow so revered his memory that she spent vast sums in the adornment of the monument. It was, when first built (in the middle of the fourth century B.C.), the most magnificent tomb on the north side of the Mediterranean, and it was because of its widespread fame that its name was preserved, for we now call any stately tomb a mausoleum. While imposing as an example of impressive ancient architecture,

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the Mausoleum was also renowned because of the rich and remarkable sculpture with which it was adorned by the greatest sculptors of the Greeks.

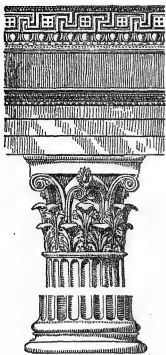


FIG. 129. A CORINTHIAN CAPITAL

The shaft of this column has been cut out in the drawing between the base and the capital to save space. The leaves of the acanthus alternate in two rows around the capital and are crowned by volutes rising to the four corners of a flat block upon which the supported stone above rests

and doing things which we would like to do. As they stand at ease in attitudes of repose, the grace and balance of the flowing lines give them a splendor of beauty unattained by any earlier sculpture of the Greeks. In great contrast to the work of Praxiteles was that of Scopas, who did much of the sculpture of the Mausoleum. He loved to fashion figures not in

Sculpture had made much progress since the days of Pericles. Phidias and his pupils depicted the gods, whom they wrought in marble, as lofty, majestic, unapproachable beings, lifted high above human weaknesses and human feeling. We remember that even the *human* figures of Phidias were not the everyday men and women, youths and maidens, whom we might have met on the streets of Athens. When Phidias and his pupils had passed away, the sculptors who followed them began to put more of the feeling and the experience of daily human life into their work and thus brought their subjects nearer to us. Among them we must give a high place, perhaps the highest place, to the Athenian sculptor Praxiteles.

His native city being without the money for great monumental works, Praxiteles wrought individual figures of life size, and most of these for foreign states. Unlike the majestic and exalted figures of Phidias, the gods of Praxiteles seem near to us. They at once appeal to us as being human like ourselves, interested in a life like ours,

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tranquil moods but in violent action, in moments of passionate excitement, like that of warriors in battle. The *faces* sculptured by Praxiteles and Scopas were no longer expressionless, as in earlier sculpture, but the artists began to put into them some of their own inner feeling. In many ways the sculpture of this age was much influenced by the work of the painters, who really led the way.

The introduction of portable paintings on canvas or panels of wood, ivory, or marble, made it easier for the painters to follow their own individual feelings, for they were thus freed from the necessity of painting large scenes on the walls of state buildings. As no oil colors were known in the ancient world, the Greek painters either employed some material like white of egg, honey, or some gluey substance to hold the colors together for application to a dry surface, or they adopted the Egyptian method of mixing colors in melted wax and then applying the fluid wax with brush and palette knife to the selected surface. The painter could now work in his own studio to please his fancy, and could sell his paintings to any private purchaser who wished to buy. It thus became customary for people of wealth to set up paintings in their homes, and in this way private support of art was increased and painting was greatly stimulated.

An Athenian painter named Apollodorus, who worked in the latter half of the fifth century B.C., seems to have been one of the first to notice that the light usually fell on an object from *one side*, leaving the unlighted side so dark that but little color showed on that side, while on the lighted side the colors came out very brightly. When he painted a woman's arm in this way, lo, it looked round and seemed to stand out from the surface of the painting; whereas up in the Painted Porch all the human limbs in the old painting of Marathon (p. 353) looked perfectly flat. By representing figures in the background of his paintings as smaller than those in front, Apollodorus also introduced what we now call perspective. As a result his paintings had an appearance of depth; and, when he painted the interior of a house, one seemed to be looking into the very room itself. He was called by the Athenians the

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"shadow painter," and the good old-fashioned folk shook their heads at his work, preferring the old style. Even the great philosopher Plato condemned this new method of painting as employing devices and creating illusions of depth which were really deception.

Nevertheless, the new method triumphed, and the younger painters who adopted it produced work which was the talk of



FIG. 130. GREEK BOY PULLING OUT A THORN (A) AND A LATER CARICATURE (B) OF THE THORN-PULLER

The graceful figure of the boy so seriously striving to remove the thorn was probably wrought not long after the Persian Wars. It was very popular in antiquity, as it has also been in modern times. The comical caricature (B) in clay (terra cotta), though it has lost one foot, is a delightful example of Greek humor expressed in parody

the town. People gossiped about it and told how a painter named Zeuxis, in order to outdo his rival Parrhasius, had painted grapes so naturally that the birds flew up to the painting and pecked at them. Thereupon Parrhasius invited Zeuxis over to his studio to inspect a painting of his. Zeuxis found it covered with a curtain which he attempted to draw aside. But his hand fell on a painted surface and he discovered to his confusion that the curtain was no more real than his own

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painted grapes had been. Such artists as Polygnotus, Apollodorus, Zeuxis, and Parrhasius may be considered as pioneers in the art of painting. Their discoveries and innovations with regard to technique, use of color and shade, or spatial relation of objects, have prepared the way for all those painters who have come after them.

The vase-painters of the period often copied the famous works of the leading sculptors and painters. But after a wonderful revival in the last Peloponnesian War, the art of vase-painting passed into a melancholy decline from which it never recovered. At the same time, in order to meet the rising desire for objects of art among the people, small artists began to furnish delightful miniature copies of famous classic works, or again they made delicious caricatures of such well-known classics. Illustrative of the emotional in the new art are the fourth-century Attic tombstones, which bear reliefs done with a soft and melancholy beauty and breathing the wistful uncertainty with which the Greeks of this age were beginning to look out into the shadow world beyond the grave.

Religion, Literature, and Thought

Any young Athenian born at about the time of Pericles' death found himself in an age of conflict wherever he went: an age of conflict *abroad* on the field of battle as he stood with spear and shield in the Athenian ranks in the long years of warfare among Athens, Sparta, and Thebes; an age of conflict *at home* in Athens amid the excited shouting and applause of the turbulent Assembly or the tumult and even bloodshed of the streets and markets of the city as the common people, the democracy, struggled with the nobles for the leadership of the state; and finally an age of conflict *in himself* as he felt his once confident faith in old things struggling to maintain itself against new views.

He recalled the childhood tales of the gods, which he had heard at his nurse's knee. When he had asked her how Athena and the gods looked, she had pointed to a beautiful vase in his father's house, bearing graceful paintings of Athena presenting the olive tree to the Athenians, and of the angry Sea-god

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striking his trident into the ground and leaving a mark which the lad's nurse had shown him at the Erechtheum on the Acropolis. There were the gods on the vase in human form, and so he had long thought of them as people like those of Athens. He had learned, too, that they were near by, for he had seen his father present gifts to them at household feasts. Later when he went to school and memorized long passages of the Homeric poems, he had learned more about their adventures on earth. Then he had stood on the edge of the crowd with his parents watching the magnificent state feasts, like the Panathenæa, supported at great expense in order to honor the gods and keep them favorable to Athens. Hence everyone seemed to him to believe that the gods had all power over Athens. On such occasions he vaguely felt the majesty and grandeur of the great gods; but when he looked upon figures of them, sculptured by such artists as Praxiteles, the gods again appeared very much like earthly folk, as he had seen them on the vase in his childhood.

He had never had any religious instruction, for there was nothing like a church, a clergy, or any religious teachers. There was no sacred book revered by all, like our Bible. He had not been taught that the gods had any interest in him or his conduct, or that they required him to be either good or bad. As long as he did not neglect any of the ceremonies desired by the gods, he knew he need have no fear of them. At the same time he realized that, if he lived an evil life, he might be condemned to enter at death a dark and gruesome dwelling place beneath the earth. On the other hand, a good life might bring him at last to the beautiful Elysian Fields.

One of the ways of reaching this place of blessedness was by initiation into the mysteries at Eleusis. Another way was to follow the teachings of the beggar-priests and soothsayers of Orpheus. These wandering teachers, like traveling revival preachers today, went about in all Greece, followed by hordes of the poor and ignorant, who eagerly accepted their mysterious teachings and were promised every blessing. The more mysterious it all was, the better the multitude liked it. These teachings were recorded in the wonderful book of Orpheus,

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which finally gained wide circulation among the common people. It came nearer to being the sacred book of the Greeks than any other that ever arose among them. All the lower classes believed in magic and were deeply impressed by the mysterious "stunts" of the magicians and soothsayers whom they constantly consulted on all the ordinary acts of life.

Down at Piræus, the harbor town, the Athenian citizen found the busy streets crowded with foreign merchants from Egypt, Phœnicia, and Asia Minor. They, too, had their assurances of divine help and blessedness, and they brought with them their strange gods: the Great Mother from Asia Minor, Isis from her lovely temple at the First Cataract of the Nile, and Egyptian Amon from his mysterious shrine far away in the Sahara, behind the Greek city of Cyrene. The famous Greek poet Pindar had written a poem in his honor and erected a statue of the Egyptian god. As a deliverer of oracles revealing the future, Amon had now become as great a favorite among the Greeks as Apollo of Delphi. There was an Athenian ship which regularly plied between the Piræus and Cyrene, carrying the Greeks to Amon's distant Sahara shrine. Egyptian symbols too were common on Greek tombstones.

Some of these foreign beliefs had once greatly impressed our citizen in his younger days. Then when he left his boyhood teacher behind and went to hear the lectures of a noted Sophist, he found that no one knew with any certainty whether the gods even existed; much less did anyone know what they were like. He now looked with some pity at the crowds of pilgrims who filled the sacred road leading to the hall of the mysteries at Eleusis. He had only contempt for the mob which filled the processions of the strange oriental gods and almost every day marched with tumult and flute-playing through the streets of Athens. While he could not follow such superstitions of the ignorant poor, he found, nevertheless, that he was not yet quite ready to throw away the gods and reject them altogether, as some of his educated neighbors were doing.

He recalled the days of his youth, when he had detested these very doubts which he had now taken up. With great enjoyment he had once beheld the caricatures of Aristophanes,

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the greatest of the comedy writers. Our citizen had shouted with delight at Aristophanes' mockery of the doubts and mental struggles of Euripides or the ridicule which the clever comedy heaped upon the Sophists. Since then, however, had come the new light which he had gained from the Sophists. Whatever the gods might be like, he was sure that they were not such beings as he found pictured among his heroic forefathers in the Homeric poems. Now he had long since cast aside his Homer. In spite of Aristophanes, he and his educated friends were all reading the splendid tragedies of Euripides, with their uncertainties, struggles, and doubts about life and the gods. Euripides, the victim of Aristophanes' ridicule, to whom the Athenians had rarely voted a victory during his lifetime, had now triumphed; but his triumph meant the defeat of the old, the victory of doubt, the overthrow of the gods, and the incoming of a new age in thought and belief. But the old died hard, and the struggle was a tragic one.

The citizen remembered well another comedy of Aristophanes, which had likewise found a ready response from the Athenian audience. It had placed upon the stage the rude and comical figure of a poor Athenian named Socrates, whom Aristophanes had represented as a dangerous man, to be shunned or even chastised by good Athenians. He was the son of a stonecutter or small sculptor. The ill-clothed figure and ugly face of Socrates had become familiar in the streets to all the folk of Athens since the outbreak of the second war with Sparta. He was accustomed to stand about the marketplace all day long, engaging in conversation anyone he met and asking a great many questions. Our citizen recalled that Socrates' questions left him in a very confused state of mind, for he seemed to call in question everything which the citizen had once regarded as settled.

Yet this familiar and homely figure of the stonecutter's son was the personification of the best and highest in Greek genius. Without desire for office or a political career, Socrates' supreme interest nevertheless was the state. He believed that the state, made up as it was of citizens, could be purified and saved only

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by the improvement of the individual citizen through the education of his mind to recognize virtue and right.

Herein lies the supreme achievement of Socrates, namely, his unshakable conviction that the human mind is able to recognize and determine what are virtue and right, truth, beauty, and honesty, and all the other great ideas which mean so much to human life. To him these ideas had *reality*. He taught that by keen questioning and *discussion* it is possible to reject error and discern these realities. Inspired by this impregnable belief, Socrates went about in Athens, engaging all his fellow-citizens in such discussion, convinced that he might thus lead each citizen in turn to a knowledge of the leading and compelling virtues. Furthermore, he firmly believed that the citizen who had once recognized these virtues would shape every action and all his life by them. Socrates thus revealed the power of virtue and of similar ideas by argument and logic, but he made no appeal to religion as an influence toward good conduct. Nevertheless, he showed himself a deeply religious man, believing with devout heart in the gods, although they were not exactly those of the fathers, and even feeling, like the Hebrew prophets, that there was a divine voice within him, calling him to his high mission.

The simple but powerful personality of this greatest of Greek teachers often opened to him the houses of the rich and noble. His fame spread far and wide, and when the Delphian oracle was asked who was the wisest of the living, it responded with the name of Socrates. A group of pupils gathered about him, among whom the most famous was Plato. But his aims and his noble efforts on behalf of the Athenian state were misunderstood. His keen questions seemed to throw doubt upon all the old beliefs. The Athenians had already vented their displeasure on more than one leading Sophist who had rejected the old faith and teaching. So the Athenians summoned Socrates to trial for corrupting the youth with all sorts of doubts and impious teachings. Such examples as Alcibiades, who had been his pupil, seemed convincing illustrations of the viciousness of his teaching; many had read and still more had seen with growing resentment the comedy of

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FIG. 131. GREEK PHYSICIAN READING FROM A ROLL

It will be seen that the physician holds the roll so that he rolls up a portion of it with one hand as he unrolls another portion with the other. He soon has a roll in each hand, while he holds, smoothly stretched out between the two rolls, the exposed portion, from which he reads a column of writing. Such a column formed for him a page; but when it was read, instead of turning a page as we do, he rolled it away to the left side and brought into view a new column from the other roll on the right side. The physician has taken the roll from a cabinet, the upper shelf of which still holds eight other rolls arranged in a pyramid-like pile. From the cases of surgical instruments standing open on the top of the cabinet we may assume that these rolls contained informative medical material, perhaps discussions of the parts and operations of the human body and suggestions for treatments of injuries such as may be found in the rolls of the Egyptian and Greek surgeons. (After Birt.)

Aristophanes in which the great teacher was held up to contempt and execration. Socrates might easily have left Athens when the complaint was lodged against him. Nevertheless he appeared for trial, made a powerful and dignified defense, and, when the court voted the death penalty, passed his last days in tranquil conversation with his friends and pupils, in whose presence he then quietly drank the fatal hemlock (399 B.C.).

Thus the Athenian democracy, which had so fatally mismanaged the affairs of the nation in war, brought upon itself much greater reproach in condemning to death, even though in accordance with law, the greatest and purest soul among its citizens.

The undisturbed serenity of Socrates in his last hours, as pictured to us in Plato's idealized version of the scene, profoundly affected the whole Greek

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world and still forms one of the most precious possessions of humanity. He was the greatest Greek, and in him Greek civilization reached its highest level. But the glorified figure of Socrates, as he appears in the writings of his pupils, was to prove more powerful even than the living teacher.

Meantime there had been growing up a body of scientific knowledge about the visible world, which men had never possessed before. Moreover this new scientific knowledge was no longer confined to the few philosophers who were its discoverers, as formerly had been the case. Our doubting citizen had at home a whole shelf of books on natural science. It included a treatise on mathematics, an astronomy in which the year was at last stated to contain $365\frac{1}{4}$ days, a zoölogy, and a botany. There was also a mineralogy, a pamphlet on foretelling the weather, and a treatise on the calendar, besides several geographies with maps of the world then known. There were also practical books of guidance and instruction on drawing, war, farming, raising horses, and even cooking.

There was in our citizen's library also a remarkable history, treating the fortunes of nations in the same way in which natural science was treated. Its author was Thucydides, the first scientific writer of history. A generation earlier Herodotus' history had ascribed the fortunes of nations to the will of the gods; but Thucydides, with an insight like that of modern historians, traced historical events to their *earthly* causes in the world of men where they occur. There stood the two books, Herodotus and Thucydides, side by side in the citizen's library. There were only thirty years or so between them, but how different the beliefs of the two historians, the old and the new! Thucydides was one of the greatest writers of impressive prose that ever lived, although he often disfigured his pages with obscure and crabbed paragraphs. His book, which told the story of the long wars resulting in the fall of the Athenian Empire, was received by the Greeks with enthusiastic approval. It has been one of the world's great classics ever since.

The success of Thucydides' work in prose shows that the interest of the Athenians was no longer in poetry but in the

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new and more youthful art of prose. Poetry, including play-writing, noticeably declined. A successful public speech was now written down beforehand, and the demand for such addresses in the Assembly, and especially before the citizen-juries, was a constant motive for the cultivation of skillful prose writing and public speaking.

The teachers of rhetoric at Athens, the successors of the old Sophists, became world-renowned, and they made the city the center of education for the whole Greek world. The leader among them was Isocrates, the son of a well-to-do flute manufacturer. Having lost his father's fortune in the Peloponnesian Wars, he turned for a living to the teaching of rhetoric, in which he soon showed great ability. He chose as his theme the great political questions of his time. He was not a good speaker, and he therefore devoted himself especially to the *writing* of his speeches, which he then published as political essays. Throughout Greece these remarkable essays were read, and probably influenced Philip, king of Macedonia.

Notwithstanding the new interest in natural science, the affairs of *men* rather than of *nature* were the burning questions at Athens. How should the governmental affairs of a community of men be conducted?—what should be the proper form of a free state?—these were the problems which Athenian experience and the efforts of Socrates toward an enlightened citizenship had thrust into the foreground. What should be the form of the ideal state? The Near East had already had its social idealism. In the Near East, however, it had never occurred to the social dreamers to discuss the *form of government* of the ideal state. They accepted as a matter of course the monarchy under which they lived as the obvious form for the state. But in Greece the question of the form of government, whether a kingdom, a republic, or an aristocracy, was now earnestly discussed. Thus there arose a new science, the *science of government*.

Plato, the most gifted pupil of Socrates, published much of his beloved master's teaching in the form of dialogues supposedly reproducing the discussions of the great teacher himself. It is to these writings that we owe our knowledge of the

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philosophy of Socrates. We are told that after Socrates was executed, Plato turned his back on his native city for a time, and traveled in Egypt and the West. When he returned to Athens, he set up his school in the grove of the Academy. Convinced of the hopelessness of democracy in Athens, he reluctantly gave up all thought of a career as a statesman, to which he had been strongly drawn, and devoted himself to teaching.

Plato was both philosopher and poet. The *ideas* which Socrates maintained the human mind could discern, became for Plato eternal realities, having an existence independent of man and his mind. The human soul, he taught, had always existed, and in an earlier state had beheld the great ideas of goodness, beauty, evil, and the like, and had gained an intuitive vision of them which in this earthly life the soul now recalled and recognized. The elect souls, gifted with such vision, were the ones to control the ideal state, for they would necessarily act in accordance with the ideas of virtue and justice which they had discerned. It was possible by education, thought Plato, to lead the souls of men to a clear vision of these ideas.

In a noble essay entitled *The Republic* Plato presented a lofty vision of his ideal state. Here live the enlightened souls governing society in righteousness and justice. They do no other work, but depend on craftsmen and slaves for all menial labor. And yet the comforts and leisure which they enjoy are the product of that very world of industry and commerce in a Greek city which Plato so thoroughly despises. The plan places far too much dependence on education and takes no account of the dignity and importance of labor in human society. Moreover, Plato's ideal state is the self-contained, self-controlling city-state as it had in times past supposedly existed in Greece. He failed to perceive that the vital question for Greece was now *the relation of these city-states to each other*. He did not discern that the life of a cultivated state unavoidably expands beyond its borders, and by its needs and its contributions affects the life of surrounding states. It cannot be confined within its *political* borders, for its *commercial* borders lie as far distant as its galleys can carry its produce.

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Thus boundary lines cannot separate nations; their life overlaps and interfuses with the life round about them. It was so within Greece, and it was so far beyond the borders of Greek territory. There had grown up a *civilized* world which was reading Greek books, using Greek utensils, fitting up its houses with Greek furniture, decorating its house interiors with Greek paintings, building Greek theaters, learning Greek tactics in war—a great Mediterranean and oriental world bound together by lines of commerce, travel, and common economic interests. For this world, as a coming *political* unity, the lofty idealist Plato, in spite of his travels, had no eyes. To this world, once dominated by oriental culture, the Greeks had given the noblest and sanest ideas yet attained by the mind of civilized man, and to this world likewise the Greeks should have given political leadership.

But while the Greeks were continually enfeebled by their own petty wars, the real political leadership of them all was held by the Persian king by the simple means of extending financial support first to Sparta, for the maintenance of the fleet that defeated Athens, and later to other Greek states. Men in practical life, like Isocrates, clearly understood the situation at this time. Isocrates urged the Greeks to bury their petty differences and expand their purely *sectional* patriotism into loyalty toward a great nation which should unite the whole Greek world. He told his countrymen that, so united, they could easily overthrow the decaying Persian Empire and make themselves lords of the world, whereas now, while they continued to fight among themselves, the king of Persia could do as he pleased with them. In an inspiring address distributed to the Greeks at the Olympic games, Isocrates said: "Anyone coming from abroad and observing the present situation of Greece would regard us as great fools struggling among ourselves about trifles and destroying our own land, when without danger we might conquer Asia." To all Greeks who had read Xenophon's story of the march of his Ten Thousand, the weakness of the Persian Empire was obvious. Every motive toward unity was present.

Nevertheless, no Greek city was willing to submit to the

leadership of another. *Local* patriotism, like the sectionalism which brought on the American Civil War, prevailed, and unalterable disunion was the end of Greek political development. As a result the Greeks were now to be subjugated by an outside power which had never had any share in advancing Greek culture. Thus the fine theories of the ideal form of the state so warmly discussed at Athens were now to be met by the hard fact of irresistible power in the hands of a single ruler—the form of power which the Greek republics had in vain striven to destroy.

But in spite of this final and melancholy collapse of Greek political power, which even the wealth and splendor of the western Greek cities in Italy and Sicily, like Syracuse, had not been able to prevent, what an incomparably glorious age of Greek civilization was this which we have been sketching! The rivalries which proved so fatal to the political leadership of the Greeks had been a constant incentive spurring them all on, as each city strove to surpass its rivals in art and literature and all the finest things in civilization. Great as the age of Pericles had been, the age that followed was still greater. The tiny Athenian state, having at most twenty-five or thirty thousand citizens, had furnished in this period a group of great names in all lines of human achievement, such as never in all the history of the world arose elsewhere in an area and a population so limited. In a book like this we have been able to offer only a few hints of all that these men of Athens accomplished. Their names today are among the most illustrious in human history, and the achievements which we link with them form the greatest chapter in the higher life of man. Furthermore, Greek genius was to go on to many another future triumph in spite of the loss of that political leadership which we are now to see passing into other hands.

CHAPTER XIX

ALEXANDER THE GREAT

The Rise of Macedonia

ON THE northern frontiers, in the mountains of the Balkan Peninsula, Greek civilization gradually faded and disappeared, merging into the barbarism which had descended from Stone Age Europe. These backward Northerners, such as the Thracians, spoke Indo-European tongues akin to Greek, but their Greek kindred of the South could not understand them. A veneer of Greek civilization served here and there to mask somewhat the rough and uncultivated life of the peasant population of Macedonia. The Macedonian kings began to cultivate Greek literature and art. The mother of Philip of Macedon was grateful that she had been able to learn to read and write Greek in her old age.

Philip himself had enjoyed a Greek education, and when he gained the power over Macedonia, in 360 B.C., he understood perfectly the situation of the disunited Greek world. He planned to make himself its master, and he began his task with the ability of both a skilled statesman and an able soldier. With clear recognition of the necessary means, he first created the indispensable military power. As a hostage at Thebes he had learned to lead an army under the eye of no less a master than Epaminondas himself, the conqueror of the Spartans. But Philip surpassed his teacher.

From the peasant population of his kingdom Philip drew off a number large enough to form a permanent or standing army of professional soldiers who never expected again to return to the flocks and fields. These men he armed as heavy infantry of the phalanx, as he had seen it in Greece; only he made the phalanx less compact and gave his men, instead of the spear, the Macedonian pike, or *sarissa*. They soon became famous as the "Macedonian phalanx."

Heretofore horsemen had played but a small part in war in Europe. The Persians had begun to show that groups of horsemen were far more speedy, flexible, and powerful than the cumbrous chariots of the old oriental armies. Horses were plentiful in Philip's kingdom, and the nobles forming a war-

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rior class had always been accustomed to fight on horseback in a loose way, each for himself. Philip now drilled these riders to move about and to attack in a single mass. The charge of such a mass of horsemen was so terrible that it might of itself decide a battle. Philip thus gave to cavalry a place in warfare which it held for two thousand years. He then further improved the art of war by a final step, the most important of all. He so combined his phalanx in the *center*, with the disciplined masses of horsemen on each *wing*, that the whole combined force, infantry and cavalry, moved and operated as one great unit, an irresistible machine in which every part worked together with all the others.

This new chapter in the art of warfare was possible only because a single mind was in unhampered control of the situation. The Greeks were now to witness the practical effectiveness of one-man control as exercised by a skillful leader for many years. With statesmanlike insight Philip first began his conquests in the region where he might expect the least resistance. He steadily extended the territory of his kingdom eastward and northward until it reached the Danube and the Hellespont.

His progress on the north of the Ægean soon brought him into conflict with the interests of the Greek states, which owned cities in this northern region. Philip's conquests were viewed with mixed feelings at Athens, toward which the Macedonian king himself felt very friendly, for he had the greatest admiration for the Greeks. Two foreign policies were discussed at Athens. One policy involved the acceptance of Philip's proffered friendship, and the Athenians were urged to ignore Macedonian interference with the Greeks in the northern Ægean and unite with the other Greek states under Philip's leadership against the Persians. A leading advocate of this policy was Isocrates (p. 400), now an aged man. The opposition, led by the great orator Demosthenes, denounced Philip as a barbarous tyrant who was endeavoring to enslave the free Greek cities.

In one passionate appeal after another Demosthenes addressed the Athenian people, as he strove to arouse them to

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the growing danger threatening the Greek states with every added triumph of Philip's powerful army. By the whirlwind of his marvelous eloquence he carried the Athenian Assembly with him. His "Philippics," as his denunciations of King Philip are called, are among the greatest specimens of Greek eloquence, and have become traditional among us as noble examples of oratorical power inspired by high and patriotic motives. But they were very immoderate in their abuse and denunciation of his opponents in Athens, nor can it be said that they display a statesmanlike understanding of the hopelessly disunited condition of the ever-warring Greek states.

The outcome of the struggle which unavoidably came on between Philip and the Greek states showed that the views of Isocrates, while less ideally attractive, were far more sagacious and statesmanlike than those of Demosthenes. After a long series of hostilities Philip defeated the Greek forces in a final battle at Chæronea (338 B.C.), and firmly established his position as head of a league of all the Greek states except Sparta, which still held out against him. He had begun operations in Asia Minor for the freedom of the Greek cities there, when two years after the battle of Chæronea he was stabbed by a resentful noble during the revelries at the wedding of his daughter.

The power passed into the hands of his son Alexander, a youth of only twenty years. Fortunately Philip also left behind him in the Macedonians of his court a group of men of remarkable ability. They were devoted to the royal house, and Alexander's early successes were in no small measure due to them. But their very devotion and ability, as we shall see, later brought the young king into a personal conflict which contained all the elements of a tremendous tragedy.

When Alexander was thirteen years of age his father had summoned to the Macedonian court the great philosopher Aristotle, a former pupil of Plato, to be the teacher of the young prince. Under his instruction the lad learned to understand the value of science and to know and love the masterpieces of Greek literature, especially the Homeric songs. The deeds of the ancient heroes touched and kindled his youthful

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imagination and lent a heroic tinge to his whole character. Philip had had the figure of Heracles (Hercules) as his ancestor stamped on his coins; Alexander believed that through his father he was descended from Heracles, and that his ancestry could be traced back through his mother to Achilles. As he grew older and his mind ripened, his whole personality was imbued with the splendor of Greek genius and Hellenic culture. Such ideas were fitted to develop into universalism, the dream of a united world, which had been first discerned by Ikhnaton of Egypt a thousand years earlier.

Campaigns of Alexander the Great

The Greek states were still unwilling to submit to Macedonian leadership, and they fancied they could overthrow so youthful a ruler as Alexander. They were soon to learn how old a head there was on his young shoulders. When Thebes revolted against Macedonia for the second time after Philip's death, Alexander, knowing that he must take up the struggle with Persia, realized that it would not be safe for him to march into Asia without giving the Greek states a lesson which they would not soon forget. He therefore captured and completely destroyed the ancient city of Thebes, sparing only the house of the great poet Pindar. All Greece was thus taught to fear and respect his power, but learned at the same time to recognize his reverence for Greek genius. Feeling him to be their natural leader, therefore, the Greek states, with the exception of Sparta, formed a league and elected Alexander as its leader and general. As a result they all sent troops to increase his army.

The Asiatic campaign which Alexander now planned was to vindicate his position as the champion of Hellas against Asia. He thought to lead the united Greeks against the Persian lord of Asia, as the Hellenes had once made common cause against Asiatic Troy. Leading his army of Macedonians and allied Greeks into Asia Minor, he therefore stopped at Troy and camped upon the plain where the Greek heroes of the Homeric songs had once fought. Here he worshiped in the temple of Athena, and prayed for the success of his cause against Persia.

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He thus contrived to throw around himself the heroic atmosphere of the Trojan War, till all Hellas beheld the dauntless figure of the Macedonian youth, as it were a new Achilles, against the background of that glorious age which in their belief had so long ago united Greek arms against Asia.

Meantime the Great King had hired thousands of Greek heavy-armed infantry, and they were now to do battle against their own Greek countrymen. At the river Granicus, in his first critical battle (334 B.C.), Alexander had no difficulty in scattering the forces of the western Persian satraps. Following the Macedonian custom, the young king, then but twenty-two years of age, led his troops into the thick of the fray and exposed his royal person without hesitation. But for the timely support of Clitus, the brother of his childhood nurse, who bravely pushed in before him at a critical moment, the impetuous young king would have lost his life here. Marching southward, he took the Greek cities one by one and freed all western Asia Minor forever from the Persian yoke.

But a huge Persian fleet was still master of the Mediterranean. It was at this juncture that the young Macedonian, little more than a boy in years, began to display his mastery of a military situation which demanded the completest understanding of the art of war. He had left a strong force at home, and he believed that the lesson of his destruction of Thebes would prevent the Persian fleet in the Ægean from arousing Hellas to rebellion against him during his absence. He therefore pushed boldly eastward. Following the route of the Ten Thousand, Alexander led his army safely through the difficult pass called the Cilician Gates and rounded the northeast corner of the Mediterranean. Here, as he looked out upon the Fertile Crescent, there was spread before him the vast Asiatic world of forty million souls, where the family of the Great King had been supreme for two hundred years. In this great arena Alexander was to be the champion for the next ten years (333-323 B.C.).

At this important point, by the Gulf of Issus, Alexander met the main army of Persia (333 B.C.), under the personal command of the Great King, Darius III, the last of the Persian



FIG. 132. ALEXANDER THE GREAT CHARGING THE BODYGUARD AND OFFICERS OF THE PERSIAN KING AT THE BATTLE OF ISSUS

Alexander, the bareheaded figure on horseback at the left, charges furiously against the Persian King (Darius III), who stands in his chariot (at the right). The Macedonian attack is so impetuous that the Persian king's life is endangered. A Persian noble dismounts and offers his riderless horse, that the king may quickly mount and escape. Devoted Persian nobles heroically ride in between their king and the Macedonian onset, to give Darius an opportunity to mount. Alexander's spear has passed entirely through the body of one of these Persian nobles, and Darius throws out his hand in grief and horror at the awful death of his noble friend. The driver of the royal chariot lashes his horses in an endeavor to carry Darius from the field in flight

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line. The tactics of his father Philip and Epaminondas, always to be the attacking party, were now adopted by Alexander in spite of the enemy's strong defensive position behind a stream. His attack was on the old plan of the oblique battle line, with the cavalry forming the right wing nearest the enemy. Heading this cavalry charge himself, Alexander led his Macedonian horsemen across the stream in such a fierce assault that the opposing Persian wing gave way. Along the center and the other wing, the battle was hotly fought and indecisive. But as Alexander's victorious horsemen of the right wing turned and attacked the exposed Persian center in the flank, the Macedonians swept the Asiatics from the field, and the disorderly retreat of Darius never stopped until it had crossed the Euphrates. The Great King then sent a letter to Alexander desiring terms of peace and offering to accept the Euphrates as a boundary between them, all Asia west of that river to be handed over to the Macedonians.

It was a dramatic picture, the figure of the young king standing with his letter in his hand. As he pondered it he was surrounded by a group of the ablest Macedonian youth, who had grown up around him as his closest friends; but likewise by old and trusted counselors upon whom his father before him had leaned. The hazards of battle and of march, and the daily associations of camp and bivouac, had wrought the closest bonds of love and friendship and intimate influence between these loyal Macedonians and their ardent young king.

As he considered the letter of Darius, therefore, his father's old general Parmenio, who had commanded the Macedonian left wing in the battle just won, proffered him serious counsel. We can almost see the old man leaning familiarly over the shoulder of this imperious boy of twenty-three and pointing out across the Mediterranean, as he bade Alexander remember the Persian fleet operating there in his rear and likely to stir up revolt against him in Greece. He said too that with Darius behind the Euphrates, as proposed in the letter, Persia would be at a safe distance from Europe and the Greek world. The campaign against the Great King, he urged, had secured all

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that could reasonably be expected. Undoubtedly he added that Philip himself, the young king's father, had at the utmost no further plans against Persia than those already successfully carried out. There was nothing to do, said Parmenio, but to accept the terms offered by the Great King.

In this critical decision lay the parting of the ways. Before the kindling eyes of the young Alexander there rose a vision of world empire dominated by Greek civilization—a vision to which the duller eyes about him were entirely closed. He waved aside his father's old counselors and decided to advance to the conquest of the whole Persian Empire. In this far-reaching decision he disclosed at once the powerful personality which represented a new age. Thus arose the conflict which never ends—the conflict between the new age and the old, just as we have seen it at Athens. Never has it been more dramatically staged than as we find it here in the daily growing friction between Alexander and that group of devoted, if less gifted, Macedonians who were now drawn by him into the labors of Heracles—the conquest of the world.

The danger from the Persian fleet was carefully and deliberately met by a march southward along the eastern end of the Mediterranean. All the Phœnician seaports on the way were captured. Here Alexander's whole campaign would have collapsed but for the siege machinery, the use of which his father had learned from the western Greeks. Against the walls of Tyre Alexander employed machines which had been devised in the Orient and which he was now bringing back thither with Greek improvements. He captured the strong city after a terrible seven months' siege. Feeble Egypt, so long a Persian province, then fell an easy prey to the Macedonian arms. The Persian fleet, thus deprived of all its home harbors and cut off from its home government, soon scattered and disappeared.

Having cut off the enemy in his rear, Alexander returned from Egypt to Asia, and, marching along the Fertile Crescent, he crossed the Tigris close by the mounds which had long covered the ruins of Nineveh. Here, near Arbela, the Great King had gathered his forces for a last stand (331 B.C.). The Persians had not studied the progress in the art of war made

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by the Greeks and the Macedonians, and they were as hopelessly behind the times as China was in her war with Japan in 1894-1895. They had prepared one new device, a body of chariots with scythes fastened to the axles and projecting on each side. But the device failed to save the Persian army. Although greatly outnumbered, the Macedonians again crushed the Asiatic army and forced the Great King into ignominious flight. In a few days Alexander was established in the winter palace of Persia in Babylon.

As Darius fled into the eastern mountains he was stabbed by his own treacherous attendants. Alexander rode up with a few of his officers in time to look upon the body of the last of the Persian emperors, the lord of Asia, whose vast realm had now passed into his hands (330 B.C.). He punished the murderers and sent the body with all respect to the fallen ruler's mother and sister, to whom he had extended protection and hospitality. Thus at last both the valley of the Nile and the Fertile Crescent, the homes of the earliest two civilizations, whose long and productive careers we have already sketched, were now in the hands of a European power and under the control of a newer and higher civilization. Less than five years had passed since the young Macedonian had entered Asia.

Although the Macedonians had nothing more to fear from the Persian arms, there still remained much for Alexander to do in order to establish his empire in Asia. On he marched through the original little kingdom of the Persian kings, whence Cyrus, the founder of the Persian Empire, had victoriously issued over two hundred years before. He stopped at Susa, the capital of Persia, to which so many rival Greek embassies had come to seek Persian support against their own Greek neighbors, and to carry away Persian gold to build fleets and pay troops. To all this Alexander had now put an end. From Susa he passed on to Pasargadæ to visit the tomb of Cyrus. At Persepolis he gave a dramatic evidence of his supremacy in Asia by setting fire to the Persian palaces with his own hand, as the Persians had once done to Miletus and to the temples on the Athenian Acropolis. By some historians this deed is regarded as merely a symbolical act of revenge; others

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accept the later gossip that, carried away by the excesses of a drunken revel, Alexander hurled the torch which destroyed the most magnificent buildings the East had ever produced. Certain it is that he afterward expressed his regret.

After touching Ecbatana in the north, and leaving behind the trusted Parmenio in charge of the enormous treasure of gold and silver, accumulated for generations by the Persian kings, Alexander again moved eastward. In the course of the next six years (330-324 B.C.), while the Greek world waited in wonder, the young Macedonian seemed to disappear in the mists on the far-off fringes of the known world. He marched his army in one vast loop after another through the heart of the Iranian plateau, northward across the Oxus and the Jaxartes rivers, southward across the Indus and the frontiers of India, where at last the murmurs of his intrepid army forced him to turn back.

With a fleet of eight hundred craft he descended the Indus, and even sailed the waters of the Indian Ocean, where he and his followers were amazed at the rise and fall of the tides, which they had never seen before. Then he began his westward march again along the shores of the Indian Ocean, accompanied by a fleet which he had built on the Indus. The return march through desert wastes cost many lives as the thirsty and ill-provisioned troops dropped by the way. Over seven years after he had left the great city of Babylon, Alexander entered it again (323 B.C.). He had been less than twelve years in Asia, and he had carried Greek civilization into the very heart of the continent. At important points along his line of march he had founded Greek cities bearing his name and had set up kingdoms which were to be centers of Greek influence on the frontiers of India. From such centers Greek art entered India, to influence greatly Indian art down until modern times; and the Greek works of art, especially coins, from Alexander's communities in these remote regions of the East penetrated even to China, to contribute to the later art of China and Japan. Never before had East and West so interpenetrated as in these amazing marches and campaigns of Alexander.

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International Policy of Alexander: Its Personal Consequences

During all these unparalleled achievements the mind of this young Hercules never ceased to busy itself with a thousand problems on every side. He dispatched an exploring expedition up the Nile to ascertain the causes of the annual overflow of the river, and another to the shores of the Caspian Sea to build a fleet and circumnavigate that sea, the northern end of which was still unknown. He was deeply interested in the geography of the mysterious ocean which he saw for the first time at the mouth of the Indus, and he dispatched his new fleet, under his friend Nearchus, to explore the coast and search for harbors from the mouth of the Indus to that of the Euphrates. He had brought a number of scientific men with him from Greece, and with their aid he sent hundreds of natural-history specimens home to Greece to his old teacher Aristotle, then teaching in Athens. He was as much interested in science as he was in his conquests, and his great campaign became *the first scientific expedition in history*.

Meantime he applied himself with diligence to the organization and administration of his vast conquests. Such problems must have kept him wearily bending over many a huge pile of state papers, or dictating his great plans to his secretaries and officers. He believed implicitly in the power and superiority of Greek culture. He was determined to Hellenize the world and to merge Asia with Europe by transplanting colonies of Greeks and Macedonians. In his army Macedonians, Greeks, and Asiatics stood side by side. He also felt that he could not rule the world as a Macedonian, but must make concessions to the Persian world. He married Roxana, a beautiful Sogdian princess, and later at a gorgeous wedding festival he obliged his officers and friends also to marry the daughters of Asiatic nobles. Thousands of Macedonians in the army followed the example of their king and took Asiatic wives. He appointed Persians to high offices and set them over provinces as satraps. He even adopted Persian raiment in part.

Amid all this he carefully worked out a plan of campaign for the conquest of the Western Mediterranean. It included

instructions for the building of a fleet of a thousand battle ships with which to subdue Italy, Sicily, and Carthage. He also planned the construction of a vast roadway along the northern coast of Africa, to be built at an appalling expense and to furnish a highway for his army from Egypt to Carthage and the Pillars of Hercules (Gibraltar). It is here that Alexander's statesmanship may be criticized. All this should have been done immediately after the destruction of Persia. But Alexander seems not to have perceived that he could convert the Mediterranean shores into a unified empire under a single ruler much more effectively than he could unite and control the scattered and far-reaching lands of the remote Orient.

What was to be Alexander's own position in this colossal world state of which he dreamed? Undoubtedly his vision of himself had grown as his power grew, until he saw himself as more than human. He had a literary friend named Callisthenes among the companions who accompanied him, and Alexander commissioned him to keep a record of all that was happening on these triumphant marches and campaigns. Unfortunately, this writing of Callisthenes perished, and only quotations from it have come down to us. These quotations, and indeed all the narratives that later grew up about the marvelous young hero, often say of him that "a longing came upon him" to do this or that, and he seems always to have followed it. His was a romantic and mystical nature which felt itself irresistibly drawn toward the things it desired. He could not resist his dreams and visions.

Early in his conquest of Egypt, while he was founding the city of Alexandria in the western Delta, we learn that "a longing came upon him" to consult the famous oracle of Amon in the Sahara Desert, and to hear some assurance regarding the future of his coming hazardous campaign into the heart of the Persian Empire. While a still unconquered Persian army was awaiting him in Asia, therefore, he had taken the time to venture with a small following on a three weeks' march far out into the Sahara Desert shrine of Amon. Here in the vast solitude Alexander entered the holy place alone. No one knew what took place there, but he was greeted by the high priest

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of the temple as the son of Zeus-Amon. All Greece heard of this remarkable occurrence, but the Hellenes had to wait some years before they learned what it all meant.

To have been greeted by the Egyptian high priest as the son of Zeus-Amon himself must have produced a profound effect on a mind like that of Alexander, for he had an imagination that knew no bounds. He had dreamed of having Mount Athos carved into a vast statue of himself with a town of ten thousand inhabitants held in his right hand. Without doubt he pondered long and seriously that greeting of the Egyptian high priest. Many a great Greek had come to be recognized as a god, and there was in Greek belief no sharp line dividing gods from men. Alexander might have himself lifted into the company of the gods, and in such a position he might impose his rule upon the Greek cities without offense. For the will of a god, in so far as a Greek believed in him at all, was still a thing to which he bowed without question and without any feeling that he was being subjected to tyranny. In this attitude of the Greek mind Alexander could find a very practical political reason for accepting the place assigned to him as the son of a god by the Egyptian high priest. At the same time the East would accept the deification of Alexander as a matter of course, because it had for ages been customary to regard the king as divine in Egypt, where he was held to be the son of the Sun-god.

Four years later the young king found that this divinity which he began to claim lacked outward and visible manifestations. As an outward observance vividly suggesting his character as a god he adopted the oriental requirement that all who approached him on official occasions should bow down to the earth and kiss his feet. He also sent formal notification to all the Greek cities that the league of which he had been head was dissolved, that he was henceforth to be officially numbered among the gods of each city and that as such he was to receive the state offerings which each city presented.

Thus were introduced into Europe absolute monarchy and the divine right of kings. Indeed, through Alexander there was transferred to Europe much of the spirit of that Orient which

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had been repulsed at Marathon and Salamis. But these measures of Alexander were not the efforts of a weak mind to gratify a vanity so drunk with power that it could be satisfied only with superhuman honors. They were carefully devised political measures dictated by state policy and systematically developed step by step for years.

This superhuman station of the world-king Alexander was gained at tragic cost to Alexander the Macedonian youth and to the group of friends and followers about him. Beneath the Persian robes of the state-god Alexander beat the warm heart of a young Macedonian. He had lifted himself to an exalted and lonely eminence whither those devoted friends who had followed him to the ends of the earth could follow him no longer. Neither could they comprehend the necessity for measures which thus strained or snapped entirely those bonds of friendship which linked together comrades in arms. And then there were the Persian intruders treated like the equals of his personal friends or even placed over them! The tragic consequences of such a situation were inevitable.

Early in those tremendous marches eastward, after Darius's death, Philotas, son of Parmenio, had learned of a conspiracy against Alexander's life, but his bitterness and estrangement were such that he failed to report his guilty knowledge to the king, who nevertheless learned of the conspiracy. The conspirators were all given a fair and legal trial, and Alexander himself suffered the bitterness of seeing a whole group of his former friends and companions, including Philotas, condemned and executed in the presence of the army. The trusted Parmenio, father of Philotas, still guarding the Persian treasure at Ecbatana, was also implicated, and a messenger was sent back with orders for the old general's immediate execution. This was but the beginning of the ordeal through which the man Alexander was to pass, in order that the world-king Alexander might mount the throne of a god.

Clitus also, who had saved his life at the Granicus, was filled with grief and indignation at Alexander's political course. At a royal feast, where these matters came up in conversation, Clitus was guilty of unguarded criticisms of his lord and then,

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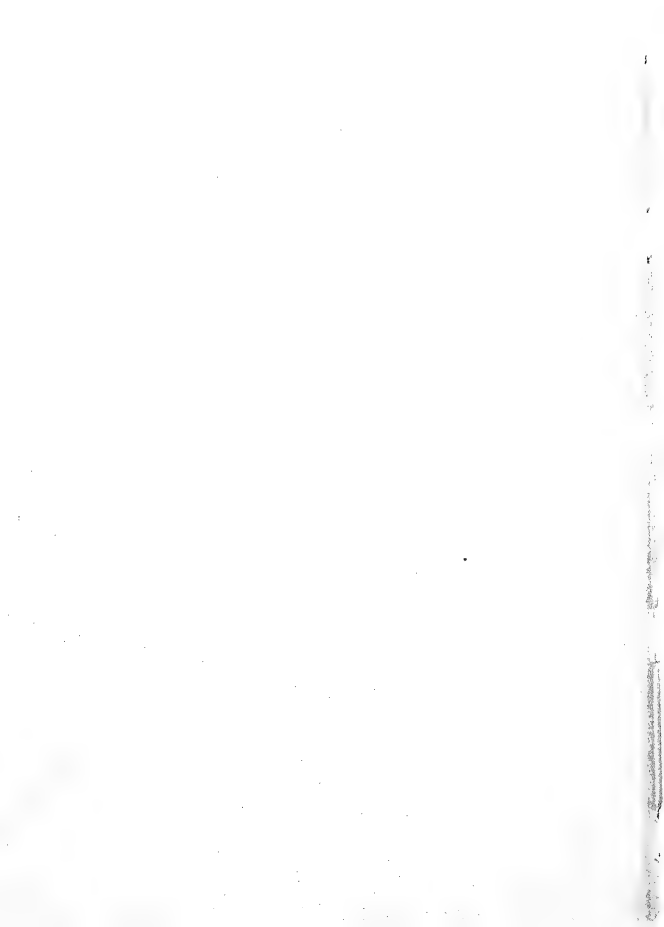
entirely losing his self-mastery, he finally heaped such unbridled reproaches upon the king that Alexander, rising in uncontrollable rage, seized a spear from a guard and thrust it through the bosom of the man to whom he owed his life. As we see the young king thereupon sitting for three days in his tent, speechless with grief and remorse, refusing all food, and prevented only by his officers from taking his own life, we gather some slight impression of the terrible personal cost of Alexander's state policy.

Similarly the demand that all should prostrate themselves and kiss his feet on entering his presence cost him the friendship of the historian Callisthenes. Although Alexander soon abandoned this requirement, nevertheless, not long afterward, Callisthenes was likewise found criminally guilty toward the king in connection with a conspiracy of the noble Macedonian pages who served Alexander, and he was put to death. He was a nephew of the king's old teacher, Aristotle, and although the friendship between master and royal pupil did not end, the old relationship could never be restored.

On his return to Babylon Alexander was overcome with grief at the loss of his dearest friend Hephæstion, who had just died. He arranged for his dead friend one of the most magnificent funerals ever celebrated. Then, as he was preparing for an expedition to circumnavigate and subjugate the Arabian peninsula and thus be free to carry out his great plans for the conquest of the Western Mediterranean, Alexander himself fell sick, probably of a malarial fever which after a few days caused his death (June, 323 B.C.). He was thirty-three years of age and had reigned thirteen years. Although so short, his was without doubt the most influential and impressive individual life that the world had ever seen. In many ways his influence was felt throughout the entire world of that day from Rome to China, especially in science, art, commerce, and statesmanship. Alexander's support of science and his persistent interest in it have led many governments ever since to realize that an enlightened government must support science. His campaigns and the cities he founded carried Greek civilization far into Asia and spread Greek art throughout India

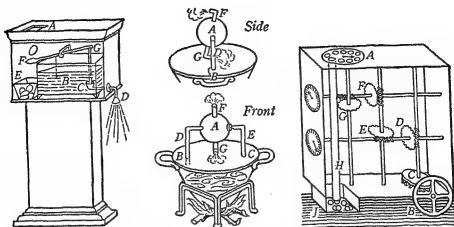
HIS INTERNATIONAL POLICY

and China. World commerce was enormously increased by the removal of all national barriers. In statesmanship Alexander's shadow, like that of some giant tree, fell far across Europe; and it is still there. He showed Europe that their little local powers and city republics must finally fall under one government, which his experience in the East had shown was to be an oriental despotism. When we reach the story of Rome we shall find that Julius Cæsar and Mark Antony were planning just such an oriental monarchy as that of Alexander's vast empire. The efforts of Augustus to preserve the forms of the old Roman Republic could not prevent it from becoming another oriental despotism like that of Alexander. In a word, the brief life of Alexander the Great completely transformed the world.



PART IV

THE MEDITERRANEAN WORLD
IN THE HELLENISTIC AGE
AND THE ROMAN REPUBLIC



MECHANICAL DEVICES AND INVENTIONS OF THE HELLENISTIC AGE

The above machines, invented in the Hellenistic Age, are found described in books written somewhere around the first century A.D. by Hero of Alexandria and the Roman Vitruvius. I illustrates the principle of the lever. An inner vessel *B* contains holy water, which flows out through the vent *C* and the outside tube *D*. The vent *C* is kept closed by the lower end of a vertical rod *CG*. This rod is raised and lowered by a lever *FG*, flattened into a small disk at *F*. The rod *CG* is heavy enough by its own weight to keep the vent *C* closed; but when a coin is dropped through the slot *A* it falls upon *F*, where it rests long enough to depress the lever at *F*, thus raising the other end at *G* and lifting the rod *CG*. This opens the vent through which the holy water flows into the worshiper's hand at *D* until the coin falls off at *F* and drops into the money box *E*. Such boxes at the doors of the Hellenistic temples enabled the priesthood to sell holy water without an attendant. II shows how heat energy may be changed into mechanical energy and motion. A cauldron *B-C* of boiling water has a steam-tight cover. Above it a hollow ball *A* is supported by the tube *D* and the rod *E*, which does not penetrate either the ball or the top of the cauldron. The ball *A* is pivoted on the rod *E*. The tube *D* enters both the ball and the top of the cauldron, and therefore conducts the accumulating steam from the cauldron into the hollow ball, where it escapes with a roar through the small bent pipes *F* and *G*. The recoil of this escaping steam causes the ball to rotate. III illustrates two principles of the *toothed*, or *cog*, wheel: (1) when the teeth of two such wheels catch in each other, the wheels always rotate in opposite directions; (2) by making one wheel large and one small, power may be multiplied. The wheel *B*, which rolls on the surface of the road, has attached to its axle a peg fitting into the cogs of the wheel *C*, which is thus rotated. Its rotation is transmitted upward through the gears *D*, *E*, *F*, and *G*. On the top of the vertical shaft *G* is attached a flat disk *A*, which is perforated with a circular line of holes. Pebbles are placed in these holes, where they rest on the top of the box. As the disk *A* revolves it drags the pebbles along; and when a pebble comes over the top of the tube *H*, it falls down through the tube into the box *J*. The machine is so geared that for every mile that is traveled one pebble falls into the box *J*, where the number of pebbles indicates the distance traveled. It was thus a sort of taximeter

CHAPTER XX

THE HEIRS OF ALEXANDER

The Division of Alexander's Empire

ALEXANDER has been well termed "the Great." Few men of genius, and certainly none in so brief a career, have left so indelible a mark upon the course of human affairs. By his remarkable conquests he gained for the Greeks that *political* supremacy which their *civilization*, as we have seen, had long before attained. His death in the midst of his colossal designs was a fearful calamity, for it made impossible forever the unification of Hellas and of the world by the power of that gifted race which was now civilizing the world. Of his line there remained in Macedonia an afflicted half brother and, ere long, Alexander II, the son of Roxana, born in Asia after Alexander the Great's death. Conflicts among the leaders at home swept away all these members of Alexander's family, even including his mother.

His generals in Babylonia found the plans for his great western campaign lying among his papers, but no man possessed the genius to carry them out. These able Macedonian commanders were soon involved among themselves in a long and tremendous struggle, which slumbered only to break out anew. The ablest of them was Alexander's great general, Antigonus, who determined to gain control of all the great Macedonian's vast empire. Then followed a generation of exhausting wars by land and sea, involving the greatest battles thus far fought by European armies. Antigonus was killed, and Alexander's empire fell into three main parts, in Europe, Asia, and Africa, with one of his generals or one of their successors at the head of each. In Europe, Macedonia was in the hands of Antigonus Gonatas, grandson of Alexander's illustrious commander Antigonus I, who endeavored to maintain control of Greece. In Asia most of the territory of the former Persian Empire was under the rule of Alexander's general, Seleucus; while, in Africa, Egypt was held by Ptolemy, one of the cleverest of Alexander's Macedonian leaders.

In Egypt Ptolemy gradually made himself king and became the founder of a dynasty or family of successive kings, whom

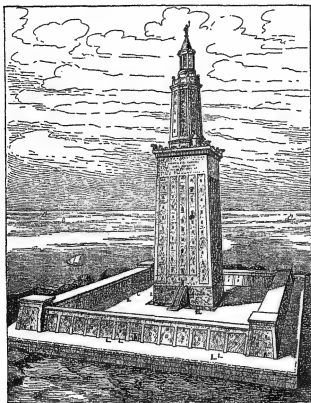


FIG. 133. THE LIGHTHOUSE OF THE HARBOR OF ALEXANDRIA IN THE HELLENISTIC AGE

The harbor of Alexandria was protected by an island called Pharos, which was connected with the city by a long causeway of stone. On the island, and bearing its name (Pharos), was built (after 300 B.C.) a lofty stone lighthouse some 445 feet high. It shows how vast was the commerce and wealth of Alexandria only a generation after it was founded by Alexander the Great, when it became the New York or Liverpool of the ancient world, the greatest port on the Mediterranean. The Pharos tower, the first of its kind, was influenced in design by oriental architecture, and in its turn it furnished the model for the earliest church spires and also for the minarets of the Mohammedan mosques. It stood for about sixteen hundred years, the greatest lighthouse in the world, and did not fall until A.D. 1326. This reconstruction was made by G. G. Woodward from geometrical drawings prepared by Don Modesto Lopez Otero, based on measurements given in a newly discovered mediæval Arabic manuscript. (Courtesy of the Duke of Alba and the *Illustrated London News*.)

we call the Ptolemies. Ptolemy at once saw that he would be constantly obliged to depend upon mercenary troops from Greece. With statesmanlike judgment he therefore built up a fleet which gave him the mastery of the Mediterranean. He chose as his residence the great harbor city of Alexandria, which Alexander had founded in the western Nile Delta. As a result it became the greatest commercial port on the Mediterranean, and for nearly a century (roughly the third century B.C.) the Eastern Mediterranean from Greece to Syria and from the Ægean to the Nile Delta was an Egyptian sea. As a barrier against their Asiatic rivals, the

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Ptolemies also took possession of Palestine and southern Syria. Thus arose an Egyptian empire in the Eastern Mediterranean like that which we found nearly a thousand years earlier in the days of Thutmose III and his successors. The Ptolemies reached out also into the Red Sea with their fleets; and from the Indian Ocean to the Hellespont, from Sicily to Syria, the Egyptian fleets dotted the seas, bringing great wealth into the treasury of the ruler.

Although these new Hellenistic rulers of Egypt were Europeans, they did not set up a Greek or European form of state. They regarded themselves as the successors of the ancient Pharaohs, and like them they ruled over the kingdom of the Nile in absolute and unlimited power. To three Greek cities on the Nile, one of which was Alexandria, they granted the right to manage their own local affairs, like a city of Greece. Otherwise there were no voting *citizens* among the people of Egypt, and, just as in ancient oriental days, they had nothing whatever to say about the government or the acts of the ruler. The chief purpose of the ruler's government was to secure from the country as large receipts for his treasury as possible, in order that he might meet the expenses of his great war fleet and his army of Greek mercenaries. Persian coins had been common in Egypt under the Persian satraps, but Egypt had never issued any coinage of her own. The first Ptolemy issued the first state coinage in Egypt, and taxes were collected both in *money* and in produce. All banks were owned by the government, and thus banking and also the sale of many staple supplies were made government monopolies. These innovations did not greatly alter the vast organization of local officials, trained to carry on the business of assessing and collecting taxes, which Egypt had been operating for thousands of years. The Greek states possessed no such organization, and the Ptolemies found it too useful to be interfered with. The tiniest group of mud huts along the river was ruled and controlled by such officials. Thus the Macedonians ruling on the Nile were continuing an ancient oriental absolute monarchy. The example of this ancient form of state, thus preserved, was of far-reaching influence throughout the Mediterranean world

and finally displaced the democracies of the Greeks and Romans.

Although they were not as powerful as the Ptolemies, the Seleucids, as we call Seleucus and his descendants, were the chief heirs of Alexander, for they held the larger part of his empire, extending from the *Ægean* to the frontiers of India. Its boundaries were not fixed, and its enormous extent made it very difficult to govern and maintain. The fleet of the Ptolemies hampered the commercial development and prosperity of the Seleucids, who therefore found it difficult to reach Greece for trade, troops, or colonists. They gave special attention to the region around the northeast corner of the Mediterranean reaching to the Euphrates, and here the Seleucids endeavored to develop another Macedonia. Their empire is often called *Syria*, after this region. Here, on the lower Orontes, Seleucus founded the great city which he called Antioch (after his father, Antiochus). It finally enjoyed great prosperity and became the commercial rival of Alexandria and the greatest seat of commerce in the northern Mediterranean.

In government the Seleucids adapted a very different plan from that of the Ptolemies. Seleucus was in hearty sympathy with Alexander's plan of transplanting Greeks to Asia and thus of mingling Greeks and Asiatics. He and his son Antiochus I founded scores of new Greek cities through Asia Minor, Syria, down the Two Rivers, in Persia, and far over on the borders of India. These cities were given self-government on the old Greek plan; that is, each city formed a little republic, with its local affairs controlled by its own citizens. The great Seleucid Empire was thickly dotted with these little free communities.

To be sure they were under the king, and each such free city paid him tribute or taxes. The form which the royal authority took was the one, so ancient in the Orient, which Alexander had already adopted. The ruler was regarded as a god to whom each community owed divine reverence and hence obedience. This homage they paid without offense to their feelings as free citizens. Greek life, with all the noble and beautiful things we have learned it possessed, took root

THE DIVISION OF ALEXANDER'S EMPIRE

throughout Western Asia and was carried far into the heart of the great continent.

Compared with her two great rivals in Egypt and Asia, Macedonia in Europe seemed small indeed. The tradition of independence still cherished by the Greek states made the Macedonian leadership of the Balkan-Greek peninsula a difficult undertaking. Fighting for their liberty after Alexander's death, the Greek states had proved too weak to maintain themselves against the Macedonian army; they were forced to submit, and the unyielding Demosthenes, whose surrender along with other democratic leaders was demanded by the Macedonians, took his own life.

While Antigonus Gonatas was struggling to establish himself as lord of Macedonia and the Greeks, he was suddenly confronted by a new danger from the far north and west. From France eastward to the lower Danube, Europe was now occupied by a vast group of Indo-European barbarians whom we call Gauls. They had penetrated into Italy after 400 B.C., and a century later they were pushing far down into the Balkan Peninsula. By 280 B.C. they broke through the northern mountains and, having devastated Macedonia, they even invaded Greece and reached the sacred oracle of the Greeks at Delphi. The barbarian torrent overflowed also into Asia Minor, where a body of the invaders settled and gave their name to a region afterwards called Galatia. Antigonus II completely defeated the barbarians in Thrace and drove them out of Macedonia, of which he then became king (277 B.C.). This overwhelming flood of northern barbarians deeply impressed the Greeks, and left its mark even on the art of the age, as we shall see. After the repulse of the Gauls, Antigonus II took up the problem of restoring his kingdom in Macedonia and establishing his power among the Greek cities. The Egyptian fleet held complete command of the Ægean and thwarted him in every effort to control Greece. As Antiochus in Asia was suffering from the Egyptian fleet in the same way, the two rulers, Antigonus and Antiochus, formed an alliance against Egypt. The energetic Antigonus built a war fleet at vast expense, and in a long naval war with the Ptolemies, which went on at intervals for

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fifteen years, Antigonus twice defeated the Egyptian fleet. As the lax descendants of the earlier Ptolemies did not rebuild the Egyptian fleet, both Macedonia and Asia profited by this freedom of the Eastern Mediterranean. But not long after these Macedonian naval victories, trouble arose in Greece which involved Macedonia in another long war there.

The Decline of Greece

Greece was no longer commercial leader of the Mediterranean. The victories of Alexander the Great had opened the vast Persian Empire to Greek commercial colonists, who poured into all the favorable centers of trade. Not only did Greece decline in population, but commercial prosperity and the leadership in trade passed eastward, especially to Alexandria and Antioch, and also to the enterprising people of Rhodes and the merchants of Ephesus. As the Greek cities lost their wealth they could no longer support fleets or mercenary armies, and they soon became too feeble to protect themselves.

They naturally began to combine in alliances or federations for mutual protection. Not long after 300 B.C. two such leagues were already in existence, one on each side of the Corinthian Gulf. On the south side of the gulf was the Achæan League and on the north side that of the Ætolians. Such a league was in some ways a kind of tiny United States. The league had its general, elected each year and commanding the combined army of all the cities; it had also its other officials, who attended to matters of defense and to relations with foreign states outside the league. Each city, however, took care of its own local affairs, like the levying and collecting of taxes. But the two leagues were mostly hostile to each other, and while they were successful for a time in throwing off Macedonian leadership, it was too late for a general federation of all the Greek states, and a United States of the Greeks never existed.

One reason for this was that Sparta and Athens refused to join these leagues. The Achæans endeavored to force Sparta into their league, but the gifted Spartan king Cleomenes defeated them in one battle after another. His victories and his reorganization of the state restored to Sparta some of her old-

THE DECLINE OF GREECE

time vigor. The Achæans were obliged to call on Macedonia for help, and in this way Cleomenes was defeated and the Spartans were finally crushed. But the Achæan League was thereafter subject to Macedonia and never enjoyed liberty again. Henceforth the Macedonians were lords of all Greece except the Ætolian League. Meantime, while keeping out of the leagues, Athens preserved her self-government by securing recognition of her neutrality and liberty by the great powers—first by Egypt and later by Rome. In spite of her political feebleness, Athens was still the home of those high and noble things in Greek civilization of which we have already learned something and to the further study of which we must now turn.

CHAPTER XXI

THE CIVILIZATION OF THE HELLENISTIC AGE

Cities, Architecture, and Art

THE three centuries following the death of Alexander we call the Hellenistic Age, meaning the period in which Greek civilization spread throughout the ancient world, especially the Orient, and was itself much modified by the culture of the Orient. Alexander's conquests placed Asia and Egypt in the hands of Macedonian rulers who were in civilization essentially Greek. Their language was in the main the Greek spoken in Attica. The orientals found the affairs of government carried on in the Greek language; they transacted business with multitudes of Greek merchants; they found many Greek books, attracting them to read. Attic Greek became the tongue of which every man of education must be master. Thus the strong Jewish community living at Alexandria now found it necessary to translate the books of the Old Testament from Hebrew into Greek, in order that their educated men might read them. While the country people of the East might learn it imperfectly, Attic Greek became, nevertheless, the daily language of the great cities and of an enormous world stretching from Sicily and southern Italy eastward on both sides of the Mediterranean and thence far into the Orient.

Civilized life in the cities was attended with more comfort and better equipped than ever before. The citizen's house, if he were in easy circumstances, might be built of stone masonry. The old central court was now often surrounded on all four sides by a pleasing colonnaded porch. Most of the rooms were still small and bare; but the large living room, lighted from the court, might be floored with a bright mosaic pavement, while the walls were plastered and adorned with decorative paintings, or even veneered with marble if the owner's wealth permitted. The furniture was more elaborate and artistic; there might be carpets and hangings; and the house now for the first time possessed its own water supply. The streets also were equipped with drainage channels or pipes, a thing unknown in the days of Pericles.

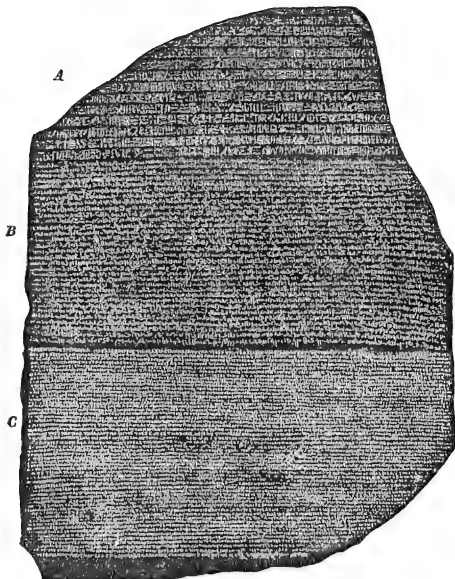


FIG. 134. THE ROSETTA STONE BEARING THE SAME INSCRIPTION IN GREEK (C) AND EGYPTIAN (A AND B)

This inscription was written in Greek because the language of the government was Greek. As it was a public record of honors which the Egyptian priests were extending to one of the Ptolemies (195 B.C.), it was written also in the ordinary Egyptian handwriting, Demotic (B), so the people might read it. The priests then wrote out the document again in the ancient sacred hieroglyphic writing (A). The stone was discovered by the soldiers of Napoleon while digging trenches near the Rosetta mouth of the Nile in 1799. It is now in the British Museum. After Champollion had learned the signs in the names of Cleopatra, Ptolemy, and some others, he was finally able to read also the hieroglyphic form of this Rosetta document, because the Greek translation told him what the hieroglyphic form meant. It was in this way that the Rosetta Stone became the key by which Egyptian hieroglyphic was deciphered

THE CIVILIZATION OF THE HELLENISTIC AGE

The daily life of the time has been revealed to us, as it went on in Egypt, in a vast quantity of surviving household documents. Among the common people ordinary receipts and other business memoranda were scribbled with ink on bits of broken pottery (Fig. 136), which cost nothing. For more im-

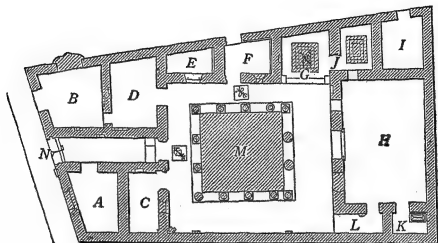


FIG. 135. PLAN OF A HOUSE OF A WEALTHY GREEK IN THE HELLENISTIC AGE

The rooms are arranged around a central court (M) which is open to the sky. A roofed porch with columns (called a peristyle) surrounds the court. The main entrance is at N, with the room of the doorkeeper on the right (A). At the corner is a shop (B). C, D, and E are for storage and housekeeping. F is a back-door entry through which supplies were delivered; it contained a stairway to the second floor. G was used as a small living room. It had a built-in divan, and the entire side toward the peristyle was open. The finest room in the house was H, measuring about 16 by 26 feet, with a mosaic floor in seven colors, and richly decorated walls. It was lighted by a large door and two windows. K was a little sleeping room, with a large marble bathtub; otherwise the sleeping rooms were all on the second floor, which cannot now be reconstructed. I was a second tiny shop. This house was excavated by the French on the island of Delos

portant documents, however, a piece of papyrus paper was used. Such papers accumulated in the house, just as our old letters and papers do. In the rainless climate of Egypt they have survived in great numbers in the rubbish heaps now covering the remains of the houses of this age. We can read a father's or a mother's invitation to the wedding of a daughter; the letter of a father to a worthy son absent at school; the repentant confessions of a wayward son who has run away

from home; the assurances of sympathy from a friend when a family has lost a son, a father, a mother, or a brother. Indeed, these documents disclose to us the daily intercourse between friends and relatives, just as such matters are revealed by letters which pass between ourselves at the present day. Such word-pictures, penned (with no thought of future readers) by long-vanished fingers, make the distant life of this far-off age seem surprisingly near and real.

The numerous new cities which this great Hellenistic Age brought forth were laid out on a systematic plan, with the streets at right angles and the buildings in rectangular blocks. At Pergamum excavation has uncovered as many as eleven metal water pipes side by side crossing a street under the pavement. But there never was any system of public street lighting in the ancient world. In the public buildings also a great change had taken place. In Pericles' time the great state buildings were the temples, but now the architects of the Hellenistic Age began to design large and splendid buildings to house the offices of the government.

These fine public buildings occupied the center of the city where in early Greek and oriental cities the castle of the king

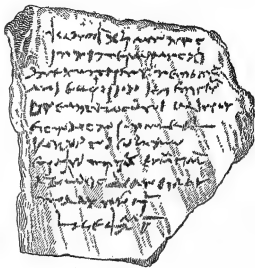


FIG. 136. POTSHERD DOCUMENT FROM THE RUINS OF AN EGYPTIAN TOWN

Thousands of personal documents of the Hellenistic Age have survived in Egypt. This specimen records a receipt for land rent and closes thus: "Eumelos, the son of Hermulos, being asked to do so, wrote for him, because he himself writes too slowly." The giver of the receipt probably could not write at all, and, to avoid this humiliating confession, says that he writes "too slowly." The hand which Eumelos wrote for him is the rapid-running business hand written by the Greeks of this age, very different from the capital letters which the Greek pottery painters made five centuries earlier

(Fig. 106)

THE CIVILIZATION OF THE HELLENISTIC AGE

had once stood. Near by was the spacious market square, surrounded by long colonnades. Here much private business of the citizens was transacted. There was, furthermore, a handsome building containing an audience room with seats arranged like a theater. The Assembly no longer met in the open air, but held its sessions here, as did the Council also. The architects had, furthermore, to provide gymnasiums and baths, a race track, and a theater. Even a small city of only four thousand people, like Priene in Asia Minor, possessed all these buildings, besides several temples, one of which was erected by Alexander himself. It is very instructive to compare such a little Hellenistic city as Priene with a modern town of four



FIG. 137. A PAPYRUS LETTER ROLLED UP AND SEALED FOR DELIVERY
Large numbers of such letters have been found in the rubbish of the ancient towns of Egypt

thousand inhabitants in America. Our modern houses are much more roomy and comfortable; but our ordinary public buildings, like our courthouses and town halls, make but a poor showing as compared with those of Priene over two thousand years ago.

On one side of the market there opened a building called a *basilica*, lighted by roof windows forming a clerestory, which the Hellenistic architects had seen in Egypt. At the same time they had become acquainted with the arch in Asia Minor, whither it had passed from the Fertile Crescent, and they now began occasionally to introduce arches into their buildings. Thus the Near East, which had contributed the colonnade to Greek architecture, now furnished two more great forms, the clerestory and the arch, although the arch was never used extensively by the Greeks.

If a little provincial Greek city like Priene possessed such splendid public buildings, an imperial capital and vast commercial city like Alexandria was correspondingly more mag-

nificent. In numbers, wealth, commerce, power, and in all the arts of civilization it was now the greatest city of the whole ancient world. Along the harbors stretched extensive docks, where ships which had braved the Atlantic storms along the coasts of Spain and Africa moored beside oriental craft which had penetrated the gates of the Indian Ocean and gathered the wares of the vast oriental world beyond. Side by side on these docks lay bars of tin from the British Isles with bolts of silk from China and rolls of cotton goods from India. The growing commerce of the city even required the establishment of government banks. From far across the sea the mariners approaching at night could catch the gleaming of a lofty beacon shining from a gigantic lighthouse tower which marked the entrance of the harbor of Alexandria. This wonderful tower, the tallest building ever erected by a Hellenistic engineer, was a descendant of the old Babylonian tower-temple, to which it was closely related.

From the deck of a great merchant ship of over four thousand tons the incoming traveler might look cityward beyond the lighthouse and behold the great war fleet of the Ptolemies outlined against the green masses of the magnificent royal gardens. Here, embowered in rich tropical verdure, rose the marble residence of the Ptolemies, occupying a point of land which extended out into the sea and formed the east side of the harbor. From the royal parks of the Persian kings and from the villa gardens of the Egyptians the Hellenistic rulers and their architects had learned to appreciate the beauty of parks and gardens artistically laid out and adorned with tropical trees, lakes, fountains, and sculptured monuments. Thus the art of landscape gardening, combined with systematic city planning (an art long familiar to the architects of the Near East), was also being cultivated by Europeans.

At the other end of the park from the palace were grouped the marble buildings of the Royal Museum, with its great library, lecture halls, exhibition rooms, courts and porticoes, and living rooms for the philosophers and men of science who resided in the institution. In the vicinity was the vast temple of Serapis, the new state god, and nearer the heart of the city

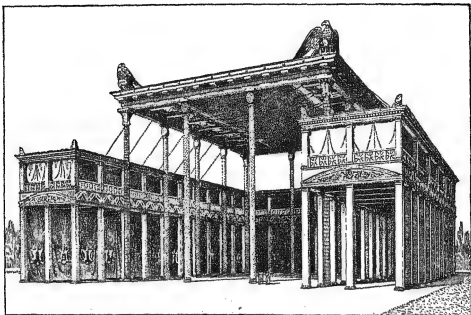


FIG. 138. GARDEN PAVILION ERECTED AS A BANQUET HALL BY KING PTOLEMY II

The banquet hall itself, which we see in the middle, was over ninety-one feet high, and its roof was supported on gold-covered columns about eighty-six feet high. The rectangular opening in the roof was covered by a magnificent scarlet awning with a white border. Two golden eagles twenty-five feet high surmounted the front of the roof. Around the outside of the surrounding lower gallery were hung scarlet curtains adorned with animal skins. Within the banquet hall, around its three closed sides, were ranged a hundred couches of gold, spread with purple covers and draped with Persian embroideries which hung down between golden sphinxes forming the legs at the corners. Each couch accommodated at least two guests, for whom there were placed individual golden tripod tables with silver bases, while behind the couches were silver basins and pitchers for cleansing the hands. It is important to notice that the Hellenistic architect, working in Egypt, adopted the old Egyptian arrangement of a high roof in the middle and a lower roof on each side, that is, a *clerestory*, affording space for light or windows between the different levels of the two roofs. This building was the link between the temple clerestory of Egypt and the basilica roof of the European cathedrals. Erected as a purely temporary outdoor banquet hall by Ptolemy II, the enormously wealthy son of Alexander the Great's body-guardsman Ptolemy I, the building of course perished long ago, and only a *written* description has made possible the above reconstruction, the work of Franz Studniczka

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were the magnificent public buildings, such as gymnasiums, baths, stadiums, assembly hall, concert hall, market places and basilicas, all surrounded by the residence quarters of the citizens. Unfortunately, not one of these splendid buildings still stands. Even the scanty ruins which survive cannot be recovered, because in most cases the modern city of Alexandria is built over them.

We are more fortunate in the case of Pergamum in Asia Minor, another splendid city of this age which grew up under Athenian influences, although sculptors of Rhodes and Ephesus shared in the work. One of the kings of Pergamum defeated and beat off the hordes of Gauls who had come in from Europe. This achievement greatly affected the sculptors who were employed by the kings of Pergamum. They wrought heroic marble figures of the northern barbarians in the tragic moment of death in battle with a dramatic impressiveness which has never been surpassed. The same struggle with the Gauls was probably commemorated in an enormous band of relief sculpture depicting the mythical battle between the gods and the giants. This vast work extended almost entirely around a colossal altar erected by the kings of Pergamum in honor of Zeus, to adorn the market-place of the city.

Besides Pergamum the outstanding art centers of the Hellenistic Age were Alexandria and Rhodes—perhaps because these cities were able and willing to support art projects. As we have seen, the masterpieces of Pergamum were created under Athenian influence; and Alexandria borrowed much from Pergamum as well as Athens. At Rhodes, however, the artistic impulse was toward the athletic art developed in the fourth century by the sculptor Lysippus on the Peloponnesus. While the sculptors of Alexandria and Pergamum worked in marble, Rhodes specialized in bronze casting. The most famous of her statues was of course the Colossus which commanded the harbor. In the second century B.C. the Rhodian sculptors tended to produce groups rather than individual figures; the best known of these groups is that which depicts the Trojan priest Laocoön and his two sons as they are crushed to death in the folds of deadly serpents. From Sidon, in the last part of

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the fourth century B.C., comes the wonderful marble sarcophagus showing Alexander the Great winning the battle of Issus, and again engaged in a lion hunt. This sculpture somewhat resembles in style the art of Scopas.

The great Greek paintings of the age show the same tendencies as does the sculpture. The painters liked to depict tragic incidents at the supreme moment. Their original works have all perished, but copies of some of them have survived, painted on the walls as interior decorations of fine houses or wrought in mosaic as floor pavement. It is the art of mosaic which has preserved to us the wonderful painting of Alexander charging on the Persian king at Issus, by an Alexandrian painter of the Hellenistic Age. The copy in mosaic was discovered in the Roman town of Pompeii in 1831; and it was reported by the ancients that the original painting was also brought to Italy and hung in Vespasian's temple of peace, but, like the temple itself, the painting has disappeared.

Both the sculptors and painters of the Hellenistic Age made wonderful progress in portraiture, and the surviving works now begin to furnish us a continuous stream of portraits which show us how the great men of the age really looked. Unfortunately these portraits are all works of the *sculptors* in stone or metal, either as statues and busts or as reliefs, especially on medallions and coins; the portraits executed by the *painters* in colors on wooden tablets have all perished. Alexander's favorite painter was Apelles. In one of his portraits of Alexander, the horse which the king was riding was said to have been painted with such lifelikeness that on a certain occasion a passing horse trotted up to it and whinnied. Later examples of this art of portrait painting have survived attached to mummies in Egypt.

Inventions and Science; Libraries and Literature

The keen and wide-awake intelligence of this wonderful age was everywhere apparent, but especially in the application of science to the work and needs of daily life. It was an age of inventions, like our own. An up-to-date man would install an automatic door opener for the doorkeeper of his house, and

a washing machine which delivered water and mineral soap as needed. On his estate olive oil was produced by a press operating with *screw* pressure. Outside the temples the priests set up automatic dispensers of holy water, while a water sprinkler operating by water pressure reduced the danger of fire. The application of levers, cranks, screws, and cogwheels to daily work brought forth cable roads for use in lowering stone from lofty quarries, and water wheels for drawing water on a large scale. A similar endless-chain apparatus was used for quickly raising heavy stone missiles to be discharged from huge missile-hurling war machines, some of which even operated by air pressure. As we go to see the "movies," so the people crowded to the market place to view the marionettes in the automatic theater, which, as devised by a clever mechanician, presented an old Greek tragedy of the Trojan War in five scenes, displaying shipbuilding, the launch of the fleet, the voyage, with the dolphins playing in the water about the vessels, and finally a storm at sea, with thunder and lightning, amid which the Greek heroes promptly went to the bottom. Housekeepers told stories of the simpler days of their grandmothers, when there was no running water in the house and they actually had to go out and fetch it a long way from the nearest spring.

A public clock, either a shadow clock or a water clock, both of which the Egyptian had had in his garden for over a thousand years, stood in the market place and furnished all the good townspeople with the hour of the day. The Ptolemies or the priests under them attempted to improve the calendar by the insertion every fourth year of a leap year with an additional day, but the people could not be roused out of the rut into which usage had fallen, and everywhere they continued to use the inconvenient moon month of the Greeks. There was no system for the numbering of the years anywhere except in Syria, where the Seleucids gave each year a number reckoned from the beginning of their sway.

The most remarkable man of science of the time was probably Archimedes. He lived in Syracuse, and one of his famous feats was the arrangement of a series of pulleys and levers which so multiplied power that the king was able by turning a

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light crank to move a large three-masted ship standing fully loaded on the dock, and to launch it into the water. After witnessing such feats as this the people easily believed Archimedes' proud boast, "Give me a place to stand on and I will move the earth."

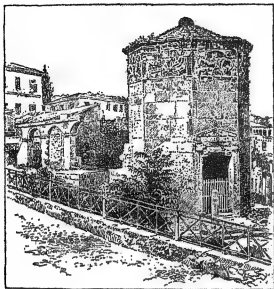


FIG. 139. THE TOWN CLOCK OF ATHENS IN THE HELLENISTIC AGE

This octagonal building is commonly called the "Tower of the Winds" because of the winged figures of the eight wind-gods sculptured on its faces. It was a water-driven clock, but the manner of its operation is not known. It was built in the last century B.C., when Athens was under the control of Rome, and it stands at the eastern limit of the Roman market place.

He devised such powerful and dangerous war machines that he greatly aided in defending his native city from capture by the Romans. But Archimedes was far more than an inventor of practical appliances. He was a scientific investigator of the first rank. He was able to prove to the king that one of the monarch's gold crowns was not of pure metal, because he had discovered the principle of determining the proportion of loss of weight when an object is immersed in water. He was thus the discoverer of what science now calls specific gravity. Besides

his skill in physics he was also the greatest of ancient mathematicians.

Archimedes was in close correspondence with his friends in Alexandria, who formed the greatest body of scientists in the ancient world. They lived together at the Museum, where they were paid salaries and supported by the Ptolemies. With the exception of the Egyptian hospital, or medical school, endowed by Darius, this organization was the first scientific institution (as yet known to us) founded and supported by a

government. Without financial anxieties they could devote themselves to research, for which the halls, laboratories, and library of the institution were equipped. Thus the scientists of the Hellenistic Age, especially this remarkable group at Alexandria, became the founders of systematic scientific research, and their books formed the sum or body of scientific knowledge for nearly two thousand years, until the revival of science in modern times.

The very first generation of scientists at the Alexandrian Museum boasted a great name in mathematics which is still famous among us—that of Euclid. His complete system of geometry was so logically built up that in modern England Euclid's geometry is still used as a school book—the oldest school book in use today. Archimedes then, for the first time, developed what is now called higher mathematics—certain difficult and advanced mathematical processes the knowledge of which having in the meantime been lost had to be rediscovered in modern times. Along with mathematics much progress was also made in astronomy. The Ptolemies built an astronomical observatory at Alexandria; and although it was, of course, without telescopes, important observations and discoveries were made. The greatest of the Alexandrian astronomers was Hipparchus. He introduced among the Greek astronomers, and more fully demonstrated, the important fact that the oblique axis of the spinning earth is slowly swinging about like the leaning axis of a wobbling top—a fact already known to the Chaldean astronomers. In the course of his investigations of this fact Hipparchus made a catalogue of nearly eleven hundred stars. He brought to bear on astronomy his unrivaled knowledge of geometry, and especially of trigonometry, a science which he was the first to develop. Believing that the earth is a sphere poised in space, Hipparchus for the first time placed astronomy on a sound scientific basis, in which there was only one important error; he did not accept the conclusion of Aristarchus, an Alexandrian astronomer of little fame who had made one of the greatest discoveries of this age in that he showed that the earth and the planets revolve around the *sun*. Hipparchus made the *earth* the center of his system, about

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which, he taught, the sun revolved. As a result, for eighteen hundred years all scientists wrongly held that the earth was the center of our universe.

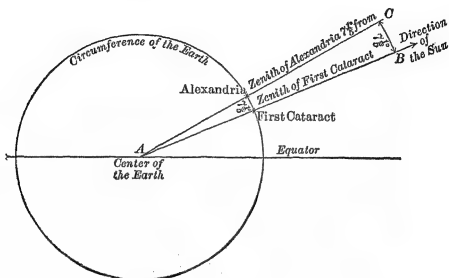


FIG. 140. DIAGRAM ROUGHLY INDICATING HOW THE SIZE OF THE EARTH WAS FIRST CALCULATED

The sun standing at noon directly over the First Cataract (line AB) was of course visible also at Alexandria. The result was just the same as if someone had stood at the First Cataract holding vertically upright a surveyor's pole tall enough to be seen from Alexandria. To Eratosthenes at Alexandria the sun was like the top of the pole. With his instruments set up at Alexandria, therefore, Eratosthenes found that the sun over the First Cataract (line AB) was $7\frac{1}{2}$ degrees south of the zenith of his instrument at Alexandria (line AC). The lines AB and AC diverge $7\frac{1}{2}$ degrees at all points, whether in the skies or on earth. Hence Eratosthenes knew that the First Cataract was $7\frac{1}{2}$ degrees of the earth's circumference from Alexandria; that is, the distance between Alexandria and the First Cataract was $7\frac{1}{2}$ degrees of the earth's circumference, or one-fiftieth of its total circumference of 360 degrees. Eratosthenes assumed that Alexandria and the First Cataract were on the same meridian, and the actual distance along this meridian between Alexandria and the First Cataract was supposed to be a little less than 500 miles. This distance (~ 500 miles), then, was one-fiftieth of the earth's circumference, giving a few hundred less than 25,000 miles for the total circumference of the earth, and for its diameter about 7850 miles, which is within 50 miles of being correct.

At Alexandria astronomy was of great assistance in the study of geography and the problem of the size of the earth. Some one told Eratosthenes, a great mathematical astronomer of Alexandria, that on the longest day of the year (that is, the day

when the summer sun, shifting steadily northward, reached its northernmost point) the sunlight shone straight down to the bottom of a well at the First Cataract of the Nile. Eratosthenes saw at once that this fact would enable him to calculate the size of the earth. His calculations gave him about seven thousand eight hundred and fifty miles as the diameter of our earth—a result surprisingly near correctness.

To this notion of the size of the earth much information had been added regarding the extent and character of the inhabited regions reached by navigation and exploration in this age. At home in Greece one geographer undertook to measure the heights of the mountains, though he was without a barometer. The campaigns of Alexander in the Far East had greatly extended the limits where the known world ended. Bold Alexandrian merchants had sailed to India and around its southern tip to Ceylon and the eastern coast of India, where they heard fabulous tales of the Chinese coast beyond.

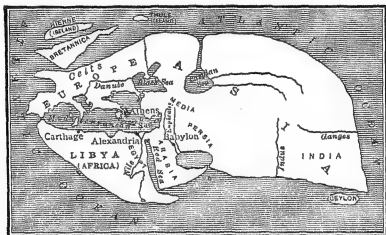
In the Far West as early as 500 B.C. Phœnician navigators had passed Gibraltar, and turning southward had probably reached the coast of Guinea, whence they brought back marvelous stories of the hairy men whom the interpreters called "Gorillas"! A trained astronomer of Marseilles named Pytheas fitted out a ship at his own expense and coasted northward from Gibraltar. He discovered the triangular shape of the island of Britannia, and, penetrating far into the North Sea, was the first civilized man to hear tales of the frozen sea beyond and the mysterious island of Thule (Iceland) on its margin. He discovered the influence of the full moon on the immense spring tides, and he brought back reports of such surprising things that he was generally regarded as a sensational fable monger.

With a greater mass of facts and reports than anyone before him had ever had, Eratosthenes was able to write a very full geography. His map of the known world (p. 444), including Europe, Asia, and Africa, showed the regions grouped about the Mediterranean with fair correctness, and he was the first geographer who was able to lay out on his map a cross-net

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of lines indicating latitude and longitude. He thus became the founder of scientific geography.

In the study of animal and vegetable life Aristotle and his pupils remained the leaders, and the ancient world never outgrew their observations. While their knowledge of botany, acquired without a microscope, was of course limited and contained errors, a large mass of new facts was observed and arranged. In anatomy and medicine the Alexandrians inherited some older oriental knowledge, just as they had done in astronomy. The Egyptian medical school, endowed two hun-



MAP OF THE WORLD ACCORDING TO ERATOSTHENES (200 B.C.)

dred years earlier by Darius the Great, was hardly more than fifty miles distant from Alexandria. The important discoveries which the Alexandrian scientists now made regarding the human brain and the nervous system were without doubt based to no small extent on the knowledge possessed by the earlier Egyptian surgeons. The Ptolemies furnished the Alexandrian scientists with condemned criminals upon whom vivisection was practiced, and the medical men of this Alexandrian laboratory were the first Greeks to undertake the systematic dissection of the human body. In carrying on this dissection they knew that the control of the limbs had its source in the brain, as shown by the old Egyptian surgeons. The Greeks now discovered the nerves and showed that the lines of connection between the whole body and the brain were the

nerves. Thus, Herophilus, the greatest of these Alexandrian anatomists, discovered the optic nerve and traced it from the eye to the brain. In this way the brain was shown to be the center of a great system of sensation and of control which we call the nervous system. Although such research came very near to discovering the circulation of the blood, the arteries were still misunderstood to be channels for the circulation of air from the lungs. Alexandria became the greatest center of medical research in the ancient world, and here young men went through long studies to train themselves as physicians, just as they do at the present day.

Notwithstanding the popularity of the natural sciences there was now also much study of language and of the great mass of older literature. Although the Ancient Near East had long before known royal libraries, the first library founded and supported by a Greek government had been formed by the city of Heraclea, on the Black Sea, during the childhood of Alexander the Great (not long before 350 B.C.). Later the kings of Pergamum also founded a very notable library. These efforts were far surpassed by the Ptolemies at Alexandria. They built a library for the Museum, where Ptolemy II had over half a million rolls. It finally contained some seven hundred thousand volumes. The art of cataloguing and managing such a great collection of books was a new one. A system had to be devised and then put into effect. The work was intrusted by the Ptolemies to a group of learned men directed by a chief librarian. The first chief librarian was Zenodotus of Ephesus. But the actual catalogue was made by the philosopher and poet Callimachus. He listed all the known books of value, both by titles and by authors, and this first great book catalogue filled one hundred and twenty books or sections.

The immense amount of hand copying required to secure good and accurate editions of famous works for this library gradually created the new science of correct publishing. The copies produced by the librarians and scholars of Alexandria became the standard editions on which other ancient libraries and copyists depended. The Hellenistic world was everywhere supplied with "Alexandrian editions," and from these are de-

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scended most of the manuscripts now preserved in the libraries of Europe, from which, in turn, have been copied our printed editions of Homer, Xenophon, and other great Greek authors. Unfortunately the library of Alexandria perished, and the

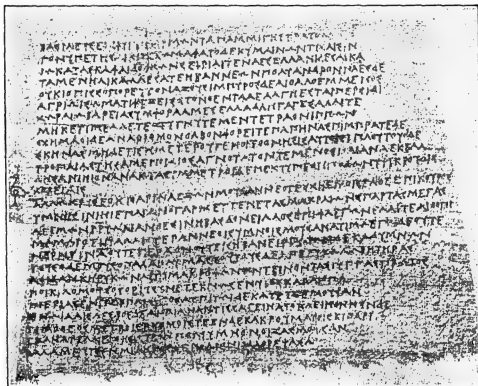


FIG. 141. A PAGE FROM THE EARLIEST SURVIVING GREEK BOOK

This book contains a poem called *The Persians*, by the Greek poet Timotheos, whose name may be seen in the third line from the bottom, at the beginning of the line. The poem tells the story of the battle of Salamis. Timotheos died 357 B.C., but this copy of the work was written in the lifetime of Alexander the Great. That which we have called a *page* is really a *column* of writing, and the book consisted of a series of such columns side by side on the rolls which once filled the Alexandrian library

earliest example of a Greek book which has survived to us is a roll which was found in an Egyptian tomb by modern excavators only a few years ago.

The new art of editing and arranging the text of books naturally required much language study. Where two old copies differed, the question would often arise, which one was correct. Many strange and old words needed explanation, just as when we read Chaucer, and there were constant questions of spell-

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ing. The Alexandrian scholars therefore began to make dictionaries. At the same time grammatical questions demanded more and more attention. At last in 120 B.C. a scholar named Dionysius wrote the first Greek grammar. It contained the leading grammatical terms, such as the names of the parts of speech, which we still use. As all these terms were explained and conveniently arranged in the grammar of Dionysius, his book was used for centuries and thus became the foundation of all later grammars of the languages of civilized peoples, including our own. Such a term as our "subjunctive mode" is simply a translation of the corresponding Greek term created by the Hellenistic scholars.

Literature was to a large extent in the hands of such learned men as those of Alexandria. The great librarian Callimachus was a famous poet of the age. These scholars no longer chose great and dramatic themes, like war, fate, and catastrophe, as the subjects of their writing. They loved to picture such scenes as the shepherd at the spring, listening to the music of overhanging boughs, lazily watching his flocks, and dreaming the while of some winsome village maid who has scorned his devotion. Such pictures of country life set in the simplicity and beauty of peaceful hillsides, and wrought into melodious verse, delighted the cultivated circles of a great world city like Alexandria even more than the revered classics of an older day. In such verse the greatest literary artist of the age was a Sicilian named Theocritus, whose idyls have taken a permanent place in the world's literature for two thousand years. At the same time the everyday life of the age was also pictured at the theater in a modern form of play, known as the new comedy. With many amusing incidents the townsmen saw their faults and weaknesses of character here depicted on the stage, and Menander at Athens, the ablest of such play-writers, gained a great reputation for his keen knowledge of men and his ability to hit them off wittily in clever comedies.

Education, Philosophy, and Religion

In such a cultivated world of fine cities, beautiful homes, sumptuous public buildings, noble works of art, state libraries,

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and scientific research, it was natural that education should have made much progress. The elementary schools, once *private*, were now often *supported by the state*. When the lad had finished at the elementary school, his father allowed him to attend lectures on rhetoric, science, philosophy, and mathe-

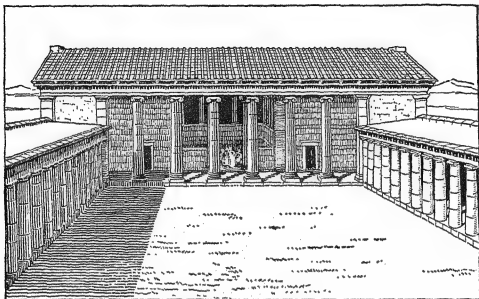


FIG. 142. HELLENISTIC GYMNASIUM AT MILETUS, THIRD CENTURY B.C.

The Hellenistic *gymnasium* was not only a gymnasium in our modern sense but also a school. Here the boys attended elementary school, and the older men, standing among the colonnades, would discuss scientific or philosophic theories while they watched the athletic exercises and contests of the boys and young men. Miletus was one of the few ancient states to recognize its responsibility in education. We know that at least two large gifts, which corresponded to modern educational endowments, were given to the city for educational purposes. (After Krischen)

matics in the lecture rooms of the gymnasium building. The wall of such a hall at Priene is still scribbled all over with the names of the boys of more than two thousand years ago, who thus recorded their permanent claims to certain seats near the wall.

The gymnasium became a place of helpful intellectual stimulus. When the fathers were no longer nimble enough for athletic games, they often sat about in the colonnades watching the contests or idling in groups, discussing the last lecture in

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science or the latest discovery in the laboratory of the Museum. Here many an argument in science or philosophy might be overheard by the young fellows, fresh from the gymnasium baths, as they wandered out to greet their waiting fathers. Such an atmosphere was one to create great interest in science and philosophy, and often a youth besought his father to give him a few years' higher study at the Museum or at Athens.

Furthermore, in the pursuit of a profession, a special training had now become indispensable to a young man's success. Like the medical student, the architect now studied his profession and bent industriously over books that told him how to erect an arch that would be safe and secure, and what were the proper proportions for a column. Young fellows who wished to become engineers studied a host of things in mechanics, like bridge-building and devices for moving heavy bodies. It was an age of technical training. This specialization in the professions was also to be found among the scientists, who now specialized each in a particular branch, like astronomy, or mathematics, or geography. The youth who wished to study science turned to the great scientific specialists at the Alexandrian Museum.

As he strolled for the first time through the beautiful gardens and into the Museum building, he found going on there lectures on astronomy, geography, physics, mathematics, botany, zoölogy, anatomy, medicine, or rhetoric, grammar, and literature. When he was sufficiently familiar with the *known* facts about these subjects, he could share in the endeavor to discover *new* facts about them. He might cross the court to the halls where the cries of suffering animals told him that vivisection was being practiced; he might climb the tower of the astronomical observatory and sit there night after night at the elbow of some eminent astronomer, or assist Eratosthenes at noonday in taking an observation of the sun for his computation of the earth's size. Or he might withdraw to the quiet library rooms and assist in making up the lists of famous old books, to be put together in Callimachus' great catalogue. If he showed ability enough, he might later be permitted to lecture

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to students himself, and finally become one of its group of famous scientific men.

On the other hand, Alexandria was not at first interested in philosophy, out of which science had grown. Athens was still the leading home of philosophy. The youth who went there to take up philosophical studies found the successors of Plato still continuing his teaching in the quiet grove of the Academy, where his memory was greatly revered. Plato's pupil Aristotle, however, had not been able to accept his master's teachings. After the education of the young Alexander, Aristotle had returned to Athens and established a school of his own at the Lyceum, where he occupied a terrace called the "Walk" (Greek, *peripatos*). Here he directed one group of advanced students after another in the arrangement and study of such subjects as anatomy, botany, and zoölogy. All of these groups collected great masses of scientific observations, which were arranged under Aristotle's guidance. The result was a veritable encyclopedia of old and new facts. The work was never completed, and many of the essays and treatises which it included have been lost. When Aristotle died, soon after the death of Alexander, his school declined.

Aristotle's works formed the greatest attempt ever made in ancient times to collect and to state in a clear way the whole mass of human knowledge. They never lost their importance and they justly gave him the reputation of having possessed the greatest mind produced by the ancient world. In later Europe, particularly in medieval times, men did not try to discover new facts in nature for themselves, but turned to Aristotle's books for the solution of every scientific problem. Indeed, the writings of no other man have ever enjoyed such widespread and unquestioned authority.¹

But many Greeks found little satisfaction in the learned researches of Plato's Academy and of Aristotle's Peripatetic school (from *peripatos*, "walk"). They desired some teaching which would lead them to a happy and contented frame of mind in living and enable them to live successfully. To meet this growing desire two more schools of philosophy arose at

¹ See Robinson, *Ordeal of Civilization*, pp. 207 f.

EDUCATION, PHILOSOPHY, AND RELIGION

Athens. The first was founded by an Oriental, a Semite named Zeno, born in Cyprus. He taught in the famous old Painted Porch in the market-place of Athens. As such a porch was called a *stoa*, Zeno's school was called the Stoic school. Zeno taught that there was but one good, and that was virtue, and but one evil, and that was moral wrong. The great aim of life should be a tranquillity of soul which comes from virtue and is indifferent both to pleasure and to pain. His followers were famous for their fortitude, and hence our common use of the word "stoicism" to indicate indifference to suffering. The Stoic school was very popular and finally became the greatest of the schools of philosophy. The last school, founded by Epicurus in his own garden at Athens, taught that the highest good was pleasure, both of body and of mind. However, as Epicurus tells us in his letters, one cannot experience pleasure unless one lives "wisely, nobly, and justly," for life which is not so lived is not pleasant. Thus Epicurus sought to instill in his followers certain ideals of serenity and self-sufficiency. It is indeed a tragedy that later men, particularly the Romans, distorted this teaching into a justification for a life of sensual pleasure. The oriental proverb, "Eat, drink, and be merry, for tomorrow we die," has therefore been commonly applied to them. Hence we still call a man devoted to pleasure, especially in eating, an epicure.

These schools lived on the income of property left them by wealthy pupils and friends. The head of the school, with his assistants and followers, lived together in quarters having rooms for lectures, books, and study. The most successful of these organizations was that of Aristotle, at least as long as he lived. The Museum of Alexandria was modeled on these Athenian organizations, and they have also become the model of academies of science and of universities ever since. We may regard Hellenistic Athens then as possessing a university made up of four departments: the Academy, the Lyceum, the Stoa, and the Garden of Epicures. Thus in the day when her political power had vanished, Athens had become even more than Pericles had hoped she might be. She was not only the teacher

THE CIVILIZATION OF THE HELLENISTIC AGE

of all Greece, but she drew her pupils from all parts of the civilized world.

For such highly educated men the beliefs of Stoicism or Epicureanism served as their religion. The gods had for such men usually ceased to exist, or were explained as merely glorified human beings. A romance writer of the day, a man named Euhemerus, wrote an attractive tale of an imaginary journey which he made to the Indian Ocean, where he found a group of mysterious islands. There, in a temple of Zeus, he found a golden tablet inscribed with a story telling how the great gods worshiped by the Greeks were once powerful kings who had done much for the civilization of mankind, and when they died they had been deified. This story of a novelist of the Hellenistic Age was widely believed, but these gods no longer attracted the reverence of religiously minded men. Moreover, there was now little pressure on any man to keep silence about his beliefs regarding the gods. There was great freedom of conscience—far more freedom than the Christian rulers of later Europe granted their subjects. The teachings of Socrates would no longer have caused his condemnation by his Athenian neighbors.

The great multitude of the people had not the education to understand philosophy, nor the means to attend the philosophical schools. Yet gods in some form they must have. With the weakening of faith in the old gods, those of the Orient, which we have already seen invading Greek life, became more and more popular. So the Ptolemies introduced as their great state god an oriental deity named Serapis, and they built for him a magnificent temple at Alexandria. From Babylonia the mysterious lore of the Chaldean astrologers was spreading widely through the Mediterranean. It was received and accepted in Egypt, and even Greek science did not escape its influence. Oriental beliefs and oriental symbols were everywhere. Men had long since grown accustomed to foreign gods, and they no longer looked askance at strange usages in religion. It was in such an age as this that Christianity, an oriental religion, passed easily from land to land.

FORMATION OF A HELLENISTIC WORLD

Formation of a Hellenistic World of Hellenic-Oriental Civilization; Decline of Citizenship and the City-State

It is a great mistake to suppose that Marathon and Salamis once and for all banished the influence of the Orient from the Mediterranean, as an impenetrable dam keeps back a body of water. While Alexander's victories and conquests destroyed the military power of the Orient, the daily life and the civilization of the people of the Orient continued to be a permanent force exerting a steady pressure upon the life of the Eastern Mediterranean world in commerce, in form of government, in customs and usages, in art, industry, literature, and religion. When Christianity issued from Palestine, therefore, as we shall see, it found itself but one among many other influences from the Orient which were passing westward. Thus while Greek civilization, with its language, its art, its literature, its theaters and gymnasiums, was Hellenizing the Orient, the Orient in the same way was exercising a powerful influence on the West and was orientalizing the Eastern Mediterranean world. In this way there was gradually formed an Eastern Mediterranean world of Hellenic-oriental civilization.

In this larger world the old Greek *city-citizen*, who had made Greek civilization what it was, played but a small part. He felt himself an *individual* belonging in an international world, a far larger world than the city in which he lived. But this larger world brought home no sense of citizenship in it, for in the great Hellenistic states there was no such thing as *national* citizenship. The city-citizen had no share in guiding the affairs of the great nation or empire of which his city-state was a part. It was as though a citizen of Chicago might vote at the election of a mayor of the city but had no right to vote at the election of a president of the United States. There was not even a name for the empire of the Seleucids, and their subjects, wherever they went, bore the names of their home cities or countries.¹ The conception of "native land" in the national sense was wanting, and patriotism did not exist.

¹ It was as though the citizens of the United States were termed Bostonians, New Yorkers, Philadelphians, Chicagoans, etc.

THE CIVILIZATION OF THE HELLENISTIC AGE

The centers of power and progress in Greek civilization had been the *city-states*, but the finest and most influential forces operating within the city-state had now disappeared. So, for example, the old city gods were gone. Likewise the citizen-soldier who defended his city had long ago given way, even in Greece, to the professional soldier who came from abroad and fought for hire. The Greek no longer stood, weapon in hand, ready to defend his home and his city-community against every assault. He found the holding of city offices becoming a profession, as that of the soldier had long been. Losing his interest in the state, he turned to his personal affairs, the cultivation of himself. The patriotic sense of responsibility for the welfare of the city-state which he loved, and the fine moral earnestness which this responsibility roused, no longer animated the Greek mind and quickened it to the loftiest achievements in politics, in art, in architecture, in literature, and in original thought. The Greek city-states, *in competition among themselves*, had developed the highest type of civilization which the world had ever seen, but in this process the city-states themselves had politically perished. In many Greek cities only a discouraged remnant of the citizens was left after the emigration to Asia. The cattle often browsed on the grass in the public square before the town hall in such cities of the Greeks. Not even their own Hellas was a unified nation.

A larger world had engulfed the old Greek city-states. But this Hellenistic world of the *Eastern Mediterranean* had by 200 B.C. reached a point in its own wars and rivalries where it was to feel the iron hand of a great new military power from the distant world of the *Western Mediterranean*. At this point (200 B.C.) we shall therefore be unable to understand the further story of the Eastern Mediterranean until we have turned back and taken up the career of the Western Mediterranean world. There in the West, for some three centuries, the city of Rome had been developing a power which was to unite both the East and the West into a vast empire including the *whole Mediterranean*.

CHAPTER XXII

THE WESTERN MEDITERRANEAN WORLD AND THE ROMAN CONQUEST OF ITALY

The Western Mediterranean World

WHILE we have been following the history of the Eastern Mediterranean and the peoples grouped about it, the story of its Western shores has largely dropped out of sight. Before we turn to this western world, however, let us endeavor to gain a picture of the Mediterranean world as a whole. We recall that in beginning the story of man we found Stone Age life not only surrounding the entire Mediterranean, but likewise spreading far northward into Europe and southward deep into the heart of Africa. It is important to notice that the drying up of North Africa finally left only a narrow fringe of fertile land between the desert and the Mediterranean Sea. As a home of civilization North Africa was therefore confined to the lower Nile Valley and the region opposite Sicily, where the fringe of cultivation is wider. It must be observed, furthermore, that the desiccation, or drying up, included much of Western Asia, and the resulting Asiatic desert extended also along the *east end* of the Mediterranean, leaving little space there for the growth of nations. It was this desert of Western Asia which separated the civilization of Babylonia and Assyria from direct contact with the Mediterranean world. The desiccation of North Africa therefore profoundly altered the Mediterranean world as a whole, for, except in the case of Egypt, it left room for the development of great and powerful civilizations *only along the northern shores of the great sea*. It is, moreover, of enormous importance to us of today in that it eventually forced human development from the south side to the north side of the Mediterranean, so that *Europe* rather than Africa became the home of our ancestors.

We must now consider the character of the northern shores of the Mediterranean, where great nations could find room for development. If we examine the map we find that the most prominent features on the north side of the Mediterranean are the three peninsulas—Greece, Italy, and Spain. We recall how Greece and its islands thrust forward and bring the south-

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eastern corner of Europe very near to the ancient civilizations of the Near East. Civilization spreading from the Near East thus reached the easternmost of the three European peninsulas first. Thence it moved westward to the middle one, that is, Italy; and as we might expect, Spain, the third and westernmost peninsula, was the last to be reached by civilization.

Besides these three European peninsulas we must not fail to notice a fourth peninsula on the north side of the Mediterranean. This is Asia Minor, the westernmost extension of Western Asia. We recall that when Cyrus conquered Asia Minor, his conquest carried the boundaries of an oriental empire far westward to the very shores of Europe. We remember that what Cyrus thus did had been going on for ages before his time; as Babylonian civilization spread westward through Asia Minor into Greece. The peninsula of Asia Minor therefore linked the Mediterranean world to that of the Two Rivers.

The Mediterranean Sea thus stretched out between three continents, with four large peninsulas, all parts of the Highland Zone, lying on its north, and a vast desert extending entirely along its south and east. This sea, together with its shores and adjacent lands, was the chief stage of ancient history. We need to add to it only the Two Rivers together with Persia on the east, and to remember that the Mediterranean has an extension in the Black Sea. This Mediterranean stage of ancient history was not a small one, for the great sea is almost as long as Europe itself.

Now the Mediterranean is not a single compact body of water, like one of the American Great Lakes. A land-bridge made up of Italy and Sicily extends almost across this great sea and divides it into two parts, an eastern and a western basin. Although there is almost no difference in climate, the western basin is much farther north than the eastern. A glance at the map will show that the *southern* shore of the western basin is in the same latitude as the *northern* shore of the eastern basin. There are no accepted geographical names for these two basins, but we may call them, for convenience, the Eastern and Western Mediterranean worlds. The story of civi-

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lization began very early in the *Eastern Mediterranean* world, but civilization was much slower in reaching and improving the life of the Western Mediterranean peoples.

The most important land in the Western Mediterranean world in early times was Italy. It slopes westward in the main, and thus faces and belongs to the Western Mediterranean world. The Italian peninsula, thrusting far out into the sea, is nearly six hundred miles long; that is, about half again as long as the peninsula of Florida. Italy¹ is not only four times as large as Greece, but, unlike Greece, it is not cut up by a tangle of mountains into tortuous valleys and tiny plains. The main chain of the Apennines, though crossing the peninsula obliquely in the north, is nearly parallel with the coasts, and many of its outlying ridges are quite so. There are more extensive plains for the cultivation of grain than we find anywhere in Greece; at the same time there is much more room for upland pasturage of flocks and herds. A considerably larger population can be supported in the plains of Italy than in Greece. There are, moreover, fewer good harbors. Hence agriculture and live stock developed much earlier than trade.

The Neolithic Age has left comparatively few traces in the great Italian peninsula; but with the coming of metal the early population of the Western Mediterranean world seems to have increased, and from this period both in Italy and elsewhere in the West, many more remains have survived. In the Bronze Age, eastern civilization first reached the Western Mediterranean world by sea. In Sicily the early tombs have been found to contain many examples of work in bronze, including eastern daggers, and especially large numbers of toilet articles, jewelry, and other things, all made by Cretan and Mycenæan craftsmen, and undoubtedly brought in by Eastern Mediterranean fleets. It has been thought that colonies of Cretan workmen may even have settled in Sicily and carried on bronze manufacturing there. These eastern ships did not stop in Sicily but passed on westward to Spain, and had intro-

¹ The area of Italy is 91,000 square miles, or, adding the neighboring islands, about 110,000 square miles, that is about twice as large as Illinois, and not quite four times the area of South Carolina.

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duced metal there before 2000 B.C. Indeed, the Bronze Age civilization which then grew up on the Mediterranean coast of Spain was so strong and flourishing by 1500 B.C. that its trade extended far northward and eastward through southern France and finally into the upper valley of the Danube.

As a whole the great Italian peninsula was not much affected by this westward spread of Bronze Age civilization in the Mediterranean. Northern Italy first began to feel the influence of the Bronze Age civilization which had developed on the north side of the Alps in the Danube Valley. The fertile plains and forest-clad slopes of Italy have always attracted the peoples of northern Europe to forsake their own bleak and wintry lands and migrate to this warm and sunny peninsula in the southern sea. Perhaps as early as 2000 B.C. a people from the north side of the Alps, who had adopted the pile-village mode of life, pushed southward through the Alpine passes and occupied the lakes of northern Italy. The remains of over a hundred of their pile-supported settlements have also been found under the soil of the Po Valley—once a vast morass, which these people reclaimed by erecting their pile dwellings farther and farther out in it. The city of Venice, still standing on piles, although it is now built mostly of stone, is a surviving example of the way the lake-dwellers once built their little wooden houses on piles in the same region. They had their influence on the later Romans, who afterward made their military camps on a plan exactly like that of the Po Valley pile-villages.

When these people reached the Po Valley, they had already received metal, which is found in all their settlements. The forms of their metal-work show that it came from the north. Nevertheless, the names for the metals which finally survived in Italy clearly show their oriental origin. Our word "copper" had the form *cuprum* in Italy, from the name of the island of *Cyprus* (ancient *Cuprus*) whose rich mines supplied the Mediterranean lands with copper from very early times. Our word "bronze" is probably derived from the first part of the name of the city of Brondesium (later Brundisium, now called Brin-

disi) at the back of the heel of Italy, where it was so near the Ægean that it very early received bronze from there.

While the pile-villagers were settling in the Po Valley, the tribes forming the western end of the Indo-European migration began to feel the attractiveness of the warm and verdant hills of Italy. Probably not long after the Greeks had pushed southward into the Greek peninsula, other western tribes of Indo-European blood had entered the beautiful Western Mediterranean world, into which the Italian peninsula extends. They came in successive migrations, but the most important group who settled in the central and southern parts of the peninsula were the Italic tribes, the earliest Italians. Their name, first applied by the Greeks to the south, was finally extended to the whole peninsula; hence the name "Italy." Probably within a few centuries they had also overflowed into Sicily.

We remember that the Greeks, in conquering the Ægean, took possession of a highly civilized region on the borders of the Near East. This was not the case with the Indo-European invaders of Italy. They found the Western Mediterranean world still without civilization. It had no architecture, no fine buildings, no fortified cities, only the rudest arts and industries, no writing, and no literature.

The Italic invaders were simple peasant folk, cultivating their little fields and pasturing their flocks. As illiterate peasants they seemed to have slight prospect of great advancement or power. Their chief qualities were a certain steadfastness of purpose, undaunted courage, and a hardihood which nothing seemed to weaken. The Italic tribes were to find this trait very much needed, for besides the pile-village folk they were after a time confronted in Italy by three powerful rivals, who came from the Eastern Mediterranean world, where they had gained all the power in wealth and weapons, military discipline, and government organization, which we have seen growing up in the great imperial civilizations of the East. It did not seem probable that the tiny groups of Italic villagers could ever hope to oppose successfully the power and influence of any of these older rivals who had extended their commerce to the west and begun to occupy such a strong position on the

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shores of the Western Mediterranean. From north to south the three rivals of the Italic tribes were the Etruscans,¹ the Greeks, and the Phoenicians, whose presence in the Western Mediterranean was due, we recall, to certain movements in the Eastern Mediterranean (pp. 262, 272, and 289).



THE FOUR RIVAL PEOPLES OF THE WESTERN MEDITERRANEAN: ETRUSCANS, ITALIC TRIBES, GREEKS, AND CARTHAGINIANS

The Etruscans settled on the western coast of Italy north of the Tiber. The earliest of them must have arrived not long after their repulse by Ramses III, that is, in the first half of the twelfth century B.C. As they pushed inland they were confronted by the pile-village folk and the Italic tribes, whose feeble village organization could not have offered much re-

¹ Ramses III's records call the Etruscans the *T-r-s*, for the Egyptian writing indicates no vowels. The Greeks call their name Tyrsenians, in which, after cutting off the ending (*enian*) and disregarding the vowels, we find again the Egyptian *T-r-s*. In the western or Latin name for these people, Etruscan, the removal of the vowels and the ending (*can*) again gives us the Egyptian *T-r-s*. The eastern origin of the Etruscans has now been proved by the discovery in 1926 of an Etruscan cemetery on the Greek island of Lemnos.

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sistance to the invaders. In the course of several centuries, as later colonists of their kindred from the Ægean arrived among them, the Etruscans took possession of north-central Italy from the Tiber to the Arnus.

By the ninth century B.C. the Etruscans began to produce works of art which tell us of the character of their developing civilization. As the earliest civilization that arose in Italy, it is important to notice that it came from the Hittite world of Asia Minor and thus brought into Italy an *oriental* civilization. For instance, the Etruscans introduced the chariot, the arch in building, and divination and foretelling by studying the liver of a sheep. All the early Etruscan works of art were likewise oriental in character and their early decorative designs repeat those of Egypt and Assyria. From their Eastern home later

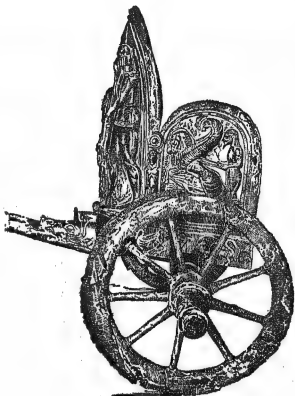


FIG. 143. ETRUSCAN CHARIOT OF BRONZE
This magnificent work is the finest surviving product of Etruscan skill in bronze. It was found in an Etruscan tomb and is now in the possession of the Metropolitan Museum of Art in New York. It probably dates from the sixth century B.C.

Etruscan colonists brought with them the alphabet which had been devised by the Phœnicians. They were, therefore, not illiterate like their predecessors in Italy. The Etruscans brought from the East also much skill as craftsmen. In Italy they found copper and in course of time they developed the finest bronze industry in the ancient world of that period. Their goldsmiths,

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too, were unrivaled by any in the older countries. Until the arrival of the painted Attic vases not long after 600 B.C., Etruscan pottery also was the best in the West.

The leading Etruscans became industrial and commercial princes, who did not give up the seafaring life. The triangular basin enclosed by Italy and the three islands—Corsica, Sardinia, and Sicily—finally came to be called the Tyrrhenian,¹ that is, the Etruscan Sea. From these waters the Etruscans marketed their wares far and wide throughout the Mediterranean. At the same time they also carried on trade with the north through the passes of the Alps. They lived in walled towns and each town was the home of a powerful Etruscan merchant-lord, who with his wealthy kindred formed the aristocracy which governed the town. There were eventually twelve of these towns, forming a loose federation, which, however, never became a firmly united nation. Etruscan settlements finally extended southward beyond Naples, eastward beyond the Apennines, and northward to the Po Valley and the southern slopes of the Alps. This first great civilized race in Italy, evidently not an Indo-European folk, seemed about to take possession of the entire Italian peninsula.

Nevertheless, the mastery of the Western Mediterranean was a prize for which the two other rivals of the Italic tribes were likewise contending, and we must now follow the three-cornered struggle. The Carthaginians were the *second* of these three rivals. During their great mercantile prosperity after 1000 B.C., the Phoenicians had carried their commerce far into the Western Mediterranean, as we have already seen. On the African coast opposite Sicily they established a flourishing commercial city called Carthage, which was before long the leading harbor in the Western Mediterranean. The Carthaginians soon held the northern coast of Africa westward to the Atlantic. Besides gaining southern Spain, they were also absorbing the islands of the Western Mediterranean, especially Sicily.

The Carthaginians and Etruscans had been facing each

¹ Tyrrhenian goes back to the Greek form, in which the Egyptian *T-r-r* became *T-r-r*.

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other across the Tyrrhenian Sea for over two centuries, when the Italic peoples saw their *third* rival invading the West. They were the Greeks. We have already followed the expansion of the Greeks in the eighth century B.C. as they founded their new colonies and city-states along the coast of Sicily and southern Italy. The strife among these city-states made the Greeks of the West as unable to unite into a Greek nation as Greece itself had been. The strongest of all these western Greek cities was Syracuse, which took the lead more than once. We recall how the Athenians tried to conquer the West by capturing Syracuse.

Although we have spoken of these three peoples—Etruscans, Carthaginians, and Greeks—as the three rivals of the Italic tribes in the West, we have already observed that these Italic tribes were at first too insignificant to do more than watch the rivalry which long remained a three-cornered one, with the Greeks in Sicily and southern Italy maintaining themselves on two fronts against both Carthaginians and Etruscans. We remember how in the famous year of Salamis the Greeks of Syracuse won a great battle against the Carthaginians and saved Sicily from being conquered by Orientals (480 B.C.). Only a few years later it was also Syracuse which met the bold Etruscan sea-rovers as their fleets appeared in the south, and totally defeated them. The western Greeks, therefore, played an important part in the political situation: first by long preventing the Carthaginians from seizing Sicily and southern Italy, and second by breaking the sea power of the Etruscans.

By 400 B.C. Dionysius, the Greek tyrant of Syracuse, was building up a powerful empire in Sicily and southern Italy, which looked like a permanent union of the western Greeks as a nation. But the successors of Dionysius were not as efficient as he. They called in the great philosopher Plato, and they attempted to carry out some of his idealistic theories of government; but the result was a disastrous collapse of the young Syracusan Empire (357-354 B.C.). Plato himself expressed the fear that the Greek language was then about to die out in Sicily, and that the island would be conquered by

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the Carthaginians or one of the rising Indo-European tribes of Italy.

Although the western Greeks, like the homeland, failed to unite in a strong and permanent state, the influence of their civilization in the West was all the more important. Their civilization was essentially the same as that which we have already sketched (Chapters XI-XXI). At the very time when Syracuse was victoriously beating back the Carthaginians and Etruscans on two fronts, some of the noblest monuments of Greek architecture were rising in these western cities. In such wonderful buildings as these, great architecture made its first appearance in the Western Mediterranean. The same was true of many other contributions of Greek culture with which we are now familiar. Thus fifteen hundred years after the Italic tribes had first settled in Italy, there arose on the south of them a wonderful world of civilization, which went on growing and developing, to reach its highest in that Hellenistic culture which brought forth an Archimedes at Syracuse. Let us now turn back to follow the career of the barbarous Italic tribes of central Italy under the leadership of Rome, and watch them slowly gaining organization and power, and finally civilization, as they are dominated first by the Etruscan and then by the Greek culture.

Earliest Rome

On the south or east bank of the Tiber, which flows into the sea in the middle of the west coast of Italy, there was a group of Italic tribes known as the Latins. In the days when the Etruscan colonists were still landing on the shores north of the Tiber, these Latin tribes had occupied a plain less than thirty by forty miles,¹ that is, smaller than many an American county. They called it Latium, whence their own name "Latins." Like their Italic neighbors, they lived in small, scattered communities, cultivating grain and pasturing flocks on the upland. Their land was not very fertile, and the battle for existence developed hardy and tenacious children of the soil.

¹ Latium probably contained somewhat over seven hundred square miles.

EARLIEST ROME

Once a year they went up to the Alban Mount, where all the Latin tribes united in a feast of their chief god, Jupiter, whose rude mud-brick sanctuary was on the mount. Close by was a small town called Alba Longa, whose leadership the Latin tribes followed when they were obliged, as they very often were, to unite and repel the attacks of their hostile neighbors

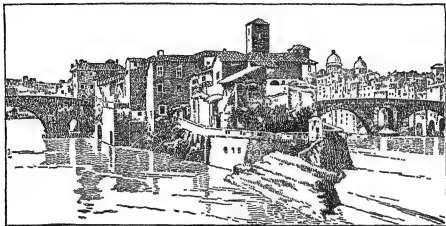


FIG. 144. THE TIBER AND ITS ISLAND AT ROME

The Tiber is not a large river, but when swollen by the spring freshets it still sometimes floods a large portion of Rome, doing serious damage. The houses which we see on the island are some of them old, but not as old as ancient Rome. The bridges, however, are very old. The one on the right of the island was built of massive stone masonry by L. Fabricius in 62 B.C. It has been standing for about two thousand years. Many great Romans, like Julius Caesar, whose names are familiar to us, must often have crossed this bridge

on all sides. They watched very anxiously the growth of the flourishing Etruscan towns on the other side of the Tiber, and they did what they could to keep the Etruscans from crossing to the Latin side.

When these Latin peasants needed weapons or tools, they were obliged to carry up a little grain or an ox to a trading-post on the south side of the Tiber, just above the coast marshes which extended some ten or twelve miles inland from the river's mouth. Shallow water at this point and an island made an easy crossing of the river, and the metal tools of the early settlers had enabled them to build a stanch bridge here. Overlooking the bridge was a bold hill called the Palatine,

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and a square stronghold crowning the hill guarded the river crossing. Several neighboring hills bore straggling villages, but the stronghold on the Palatine was their leader. Here, stopped by the shoals and the bridge, moored now and then

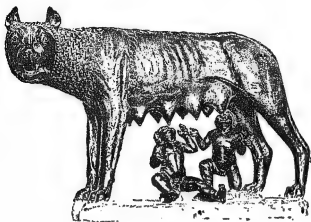


FIG. 145. BRONZE WOLF FROM THE CAPITOL AT ROME

The wolf (sixth century B.C.) was made by Etruscan artists under Greek influence in Italy. The two infants nourished by the she-wolf are later additions, put there in accordance with the tradition at Rome that the city was founded by these twin brothers, named Romulus and Remus. Their ancestor, so said the tradition, was Æneas, one of the Trojan heroes, who had fled from Troy after its destruction and, after many adventures, had arrived in Italy. His son founded and became king of Alba Longa. In the midst of a family feud among his descendants these twin boys, the sons of the war-god, Mars, were born; and after they had been set adrift in the Tiber by the ruling king, their boat gently ran aground at the base of the Palatine Hill, where a she-wolf found and nourished the babes. When they grew up they founded Rome. Similar legends formed all that the Romans knew of their early history, through the period of the kings and far down into the Republic

an Etruscan ship which had sailed up the Tiber, the only navigable river in Italy. On the low marshy ground, encircled by the hills, was an open-air market, beside an old cemetery belonging to the villages. Here in the Forum, as they called this valley market, our Latin peasant could meet the Etruscan traders and exchange his grain or his ox for the metal tools or weapons which he needed. These were now of iron, but he remembered the stories of his fathers, telling how all their tools and weapons were formerly of bronze. The population of the villages was very mixed—

some Latin families who had taken to trading or owned fields near by, Etruscan traders and landowners, and a few oversea strangers of various nationalities, with many outcasts and refugees from outlying communities.

EARLIEST ROME

The fears of the Latin tribes regarding an invasion of the Etruscans were finally realized. We have seen that the Etruscan towns after 800 B.C. stretched far across northern Italy—a great group of allied city-kingdoms, each with its fortified city. Perhaps as early as 750 B.C. one of their princes crossed the Tiber, drove out the last of the line of Latin chieftains, and took possession of the stronghold on the Palatine. From this place as his castle and palace he gained control of the villages on the hills above the Tiber, which then gradually merged into the city of Rome. These Etruscan kings soon extended their power over the Latin tribes of the Plain of Latium, and the town of Alba Longa by the Alban Mount, which once led the Latins, disappeared. Thus Rome became a city-kingdom under an Etruscan king, like the other Etruscan cities which stretched from Capua far north to the harbor of Genoa. And such it remained for two centuries and a half. Although Rome was ruled by a line of Etruscan kings, it must be borne in mind that the population of Latium which the Etruscan kings governed continued to be Latin and to speak the Latin tongue.¹

Nevertheless, the civilization of Rome became essentially Etruscan, and with the Etruscan kings began a much more civilized life than the city had ever seen before. They introduced important improvements, some of which have lasted till our times. The Forum, the low market valley, was often flooded in the rainy season by stagnant water, forming malaria-breeding pools. The Etruscan kings therefore built a massive masonry drain with an arch forming the roof. The drain carried off the water from the Forum and conducted it into the river, thus making the city more healthful. This ancient sewer

¹ The above presentation makes the line of early kings at Rome (about 750 to about 500 B.C.) exclusively Etruscan. The traditional founding of Rome not long before 750 B.C. would then correspond to its capture and establishment as a strong kingdom by the Etruscans. We possess no written documents of Rome for this early period. Our conclusions are based on a study of archeological remains. If these remains had formed our only evidence, no one could ever have reached any other conclusion than that the kings of Rome were Etruscans. The later Romans themselves, however, with evident disinclination to believe that their early kings had been outsiders, cherished a tradition that their kings were native Romans. This tradition, with many picturesque and pleasing incidents (Fig. 145), has found a place in literature and is still widely believed.

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drain built by the Etruscans still survives. On the hill called the Capitol, between the Forum and the Tiber, they built a temple to Jupiter, the state god, which stood for centuries. The earliest architecture known in Rome was Etruscan, and hence it was that Roman architecture differed from that of the Greeks by its constant use of the arch, inherited from the Etruscans.

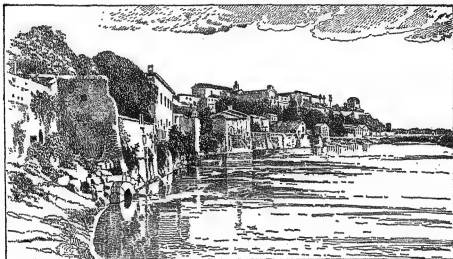


FIG. 146. A VIEW OF THE TIBER WITH THE AVENTINE HILL AND THE ETRUSCAN DRAIN

As we look down the Tiber in this view we stand not far from our former position looking up the river (Fig. 144). The Aventine Hill is at the left. Along its foot, at the water's edge, extend the houses of modern Rome. At this end of this row of houses we see the arched opening of the ancient Etruscan sewer, which served to drain the Forum under which it passed. The Romans called it the *Cloaca Maxima* (chief sewer). Although much altered in later times, its most ancient portions are probably the oldest surviving masonry at Rome

Etruscan ships had known Greek waters since Mycenæan days, and the Etruscans were constantly trafficking in the Greek harbors. This intercourse with Greece brought in beautiful Greek pottery and the Etruscans quickly learned to make similar decorative paintings. Many such paintings still cover the walls of Etruscan tombs and show us how the Etruscans looked, the clothing they wore, and the weapons they carried. Etruscan civilization was finally a composite built up out of

their old Eastern Mediterranean culture and Greek civilization. It was this Etruscan civilization, modified by much Greek influence, which shaped the life of Rome after 600 B.C.

Eventually the cruelty and tyranny of the Etruscan rulers caused a revolt, led probably by the Etruscan nobles themselves, and the kings of Rome were driven out. The fugitive king and his followers fled northward to their kinsmen, to Cære. Thus about 500 B.C. the career of Rome under kings came to an end; but the two and one-half centuries of Etruscan rule left their mark on Rome, always afterward discernible in such things as art, architecture, religion, and tribal organization. Many Etruscans continued to live in Rome and Latium. In the days of Roman splendor some of the greatest families of Rome were of Etruscan descent and were proud of it. After their expulsion from Rome the Etruscans continued as a powerful and highly civilized federation, although surrounded by dangerous enemies. They lost their northern territory to the invading Gauls, and one after another their southern and central towns were captured by the Samnites and the Romans. At Cære their splendid tombs still survive, and we have many Etruscan inscriptions, but unfortunately they cannot yet be understood; for although the Etruscan alphabet is related to ours and we can read the Etruscan words and letters, the meaning is unknown.

The Early Republic; Its Progress and Government

During this Etruscan period, Greek influences were equally important in Latium, as we have seen. Down at the dock below the Tiber bridge, ships from the Greek cities of the south were becoming more and more common. Long before the Etruscan kings were driven out, the Roman trader had gradually learned to pick out the names of familiar objects of trade in the bills handed him by the Greek merchants. Ere long the Roman traders were scribbling memoranda of their own with the same Greek letters, which thus became likewise the Roman alphabet, slightly changed to suit the Latin language. Thus the oriental alphabet was carried one step further in the long westward journey which finally made it the alphabet with

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which this book is printed. In the hands of the Carthaginians and Romans in the West, and the Arameans in the East, the Phœnician alphabet and its descendant alphabets at length stretched from India to the Atlantic.

There had been at first no *Roman* ships lying at the Tiber docks, but as time passed a Roman mechanic here and there learned to build a ship like those of the Greeks alongside it. As Roman traffic thus grew, it was found very inconvenient to



FIG. 147. EARLY ROMAN BRONZE COIN, CALLED AN AS

In the time of Alexander the Great (second half of the fourth century B.C.) the Romans found it too inconvenient to continue paying their debts in goods and cattle. That cattle were used very frequently for money is shown by the fact that the Roman word for cattle (*pecus*) was the origin of one of their common words for property (*pecunia*) and has descended to us in our common word "pecuniary." The Romans probably learned from the Etruscans how to use large disks of bronze as money. The coin shown above weighed about a pound. It was minted at Rome and stamped on the obverse (A) with the head of Janus (god of gates and doors) and on the reverse (B) with a ship's prow

pay bills with grain and oxen while the Greek merchant at the dock paid his bills with silver coins. It was not until over a hundred and fifty years after the Etruscan kings had been driven out that the Romans began to issue copper or bronze coins (Fig. 147). Later, as contact with the Greek cities increased, the Romans also began to issue silver coins, using as a basis the Attic drachma. In the same way, too, the Romans gradually adopted the oriental measures of length and of bulk with which the Greeks measured out to them the things they bought.

Greek speech, too, began to leave its traces in the Latin speech of Rome. The Latin townsmen and peasants learned

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the Greek words for the clothing offered to them for sale, or for household utensils and pottery and other things brought in by the Greeks. So the Phœnician garment which the Greek merchants called ¹ki-tôn', the Latin peasants pronounced *ktún* (*ktoón*), and in course of time they gave it a Latin ending *ic* and dropped the *k*, so that it became our familiar word "tunic."

But the Greeks also brought in things which could not be weighed and measured like produce, from a realm of which the Roman was beginning to catch fleeting glimpses. For the peasant heard of strange gods of the Greeks, and he was told that they were the counterparts or the originals of his own gods. For him there was a god over each realm in nature and each field of human life: Jupiter was the great Sky-god and king of all the gods; Mars, the patron of all warriors; Venus, the queen of love; Juno, an ancient Sky-goddess, was protectress of women, of birth and marriage, while Vesta, too, watched over the household life, with its hearth fire surviving from the nomad days of the fathers on the Asiatic steppe two thousand years before. Ceres was the goddess who maintained the fruitfulness of the earth, and especially the grainfields (cf. English "cereal"); and Mercury was the messenger of the gods who protected intercourse and merchandising, as his name shows. The streets were full of Greek stories regarding the heroic adventures of these divinities when they were on earth. The Roman learned that Venus was the Greek Aphrodite, Mercury was Hermes, Ceres was Demeter, and so on.

This process was aided by the influence of Greek oracles. The oracles delivered by the Greek Sibyl, the prophetess of Apollo of Delphi, were deeply revered by Italy. Gathered in the Sibylline Books, they were regarded by the Romans as mysterious revelations of the future. Another method of reading the future was brought in by the Etruscans, who were able to discover in the liver of a sheep killed for sacrifice signs which they believed revealed the future (Fig. 148).

An art like this appealed to the rather coldly calculating mind of the Roman. As he looked toward his gods he felt no

¹ κ = German *ch* as in *ach*; see *chiton*.

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doubts or problems, like those which troubled the spirit of Euripides. He lacked the warm and vivid imagination of the Greeks, which had created the beautiful Greek mythology. He was inclined to regard acts of worship as the mere fulfillment of a contract by which the gods must bestow favors if the worshiper was faithful in the performance of his duties. In religion, therefore, the Roman saw only a list of mechani-



FIG. 148. ANCIENT BABYLONIAN DIVINER'S BAKED-CLAY MODEL OF SHEEP'S LIVER (A) COMPARED WITH BRONZE MODEL OF A LIVER USED BY THE ETRUSCANS (B)

The surface of the Babylonian model is marked with lines and holes, indicating the places where the diviner must look for the mysterious signs which disclosed the future. These signs were of course the highly varied natural shapes and markings to be observed in *any* sheep's liver, but the Babylonian believed that these things were signs placed on the liver by the god to whom the sheep had been given, when it was slain as a sacrifice. The meaning of each part of the liver is here written in cuneiform in the proper place. The whole forms a kind of map of the surface and shape of the liver, with written explanations. Absurd as all this seems to us, the art of reading the future in this way was believed in by millions of people, and was finally brought to Italy by the Etruscans (B), who had probably received it from the Babylonians by way of Asia Minor

cal duties, such as the presentation of offerings, the sacrifice of animals, and the like; and such duties were easily fulfilled. In accordance with this rather legal conception of religion, he was fitted for great achievements in political and legal organization, but not for new and original developments in religion, art, literature, or discoveries in science.

Hence it is that in sketching the beginnings of Rome we have found no Homer to picture to us in noble verse the heroic days of her early struggles. Although less gifted than the

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Greeks, the Romans nevertheless possessed a remarkable ability in applying sober and practical common sense, *enlightened by experience*, to every problem they met. As we shall see, the Romans so contrived their government that it was led and guided by the combined experience of the ripest and most skilled leaders among them. Thus the Roman state was never exposed to the momentary whims of an inexperienced multitude as in Athens. It was this wisdom and sagacity of the Romans in practical affairs which gave them marked superiority over the Greeks in such matters. Let us now see how Roman political wisdom developed the invincible Roman state.

When the Etruscan kings were driven out of Rome, about 500 B.C., the nobles, called *patricians*, who had been chiefly instrumental in expelling them, were in control of the government. But none of their number was able to make himself king. Perhaps by compromise with the people, the patricians agreed that two of their number should be *elected* as heads of the state. These two magistrates, called *consuls*, were both to have the same powers, were to serve for a year only and then give way to two others. To choose them, annual elections were held in an assembly of the weapon-bearing men, largely under the control of the patricians. Nevertheless, we must call this new state a republic, of which the consuls were the presidents, for the people had a voice in electing them. But as only patricians could serve as consuls, their government was very oppressive. The people (called the *plebs*; compare our "plebeian"), especially among the Latin tribes, refused to submit to such oppression.

The patricians were unable to get on without the help of the peasants as soldiers in their frequent wars. They therefore agreed to give the people a larger share in the government, by allowing them in their own assembly to elect a group of new officials, called *tribunes*. The tribunes had the right to veto the action of any officer of the government—even that of the consuls themselves. When any citizen was treated unjustly by a consul, he had only to appeal to the tribunes and they could rescind the consul's unjust action and even save a citi-

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zen from sentence of death. The tribunes therefore gained great influence, because they could stop the enforcement of any law they thought unjust. Later, as government business increased, their number was also increased.

In the beginning it would seem that almost all the business of government was in the hands of the consuls. They were the commanding generals of the army in war, they had charge of the public funds in the treasury, and they were the judges in all cases at law. It was difficult to combine all these duties. The consuls were often obliged to be absent from Rome for long periods while leading the army, and at such times they were of course unable to give any attention to cases at law, and two citizens having a lawsuit might be obliged to wait until the war was over. Much other ordinary business, like that of the treasury, demanded more time than the consuls could possibly give it. They found it difficult to carry on the volume of business which the government required.

This situation made it necessary to create new officers for various kinds of business. To take care of the government funds, treasury officials called *quæstors* were appointed. Two public officers called *censors* were required to keep lists of the people, to assess the amount of taxes each citizen owed, to determine voting rights, and to look after the daily conduct of the people and see that nothing improper was permitted. Our own use of the word "censor" is derived from these Roman officials. For the decision of legal cases a judge called a *prætor* was appointed to assist the consul, and the number of such judges slowly increased. In times of great national danger it was customary to appoint some revered and trustworthy leader as the supreme ruler of the state. He was called a *dictator*, and he could hold his power but a brief period.

But a government is called upon to do some other things of great importance besides attending to administrative, financial, and legal business. Important public questions arise which are not mere items of routine business. Examples of such questions are declaring war, restoring peace, and making new laws of all sorts. The consuls had great power and influence in all such matters, but they were much influenced by a council of

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patricians called the Senate (from Latin *senex*, meaning "old man"), which had existed even as far back as the Etruscan kings, who used to call upon the Senate for advice. Now the patricians enjoyed the exclusive right to serve as consuls, to sit in the Senate, and to hold almost all of the offices created to carry on the business of government. The power which the patricians held, therefore, quite unfairly exceeded that of the plebeians.

The tribunes, as we have seen, could protect the people from some injustices, and save their lives if they were illegally condemned to death, but they could not secure to the citizen all his rights. The tribunes could not recover for the cattle of the people the vanished grass in the public pastures, when they had been nipped clean by the great herds of the patricians. The tribunes could not secure for a citizen the right to be elected as consul, or to become a senator, or to marry a patrician's daughter. The struggle which had resulted in the appointment of the tribunes, therefore, went on—a struggle of the common people to win their rights from the wealthy and powerful. It was a struggle like that which we have followed in Athens and the other Greek states, but at Rome it reached a much wiser and more successful settlement. The citizens of Rome manfully stood forth for their rights, and without fighting, civil war, or bloodshed they secured them to a large extent in the course of the first two centuries after the founding of the Republic.

They insisted upon a record of the existing laws in writing, in order that they might know by what laws they were being judged. About fifty years after the establishment of the Republic, the earliest Roman laws were reduced to writing and engraved upon twelve tablets of bronze (450 B.C.). But at the same time the people demanded the right to share in the making of *new* laws, and to possess an assembly of the people, which might pass new laws.

Far back in the days of the kings the people had enjoyed the right to a limited share in the government. To express their opinion they gathered in an assembly called the *Comitia*. It was made up of groups of families or brotherhoods (like

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the Greek brotherhoods) each called a *curia*. Hence this assembly was called the *Comitia curiata*. Each such brotherhood assembled and voted by itself, and its decision then counted as one vote. A majority of the brotherhoods decided a question.

In the early days of the Republic, when the frequent wars kept the people much together in camp, arrayed in their fighting hundreds, or "centuries," it easily became customary to call them together by centuries. Thus a new assembly by centuries arose, called for this reason the *Comitia centuriata*. Owing to the expense of arms and equipment, the men of wealth and influence in the centuries far outnumbered the poorer classes. The assembly by centuries was therefore controlled by the wealthy and noble classes; they were soon electing the consuls, and ere long they had deprived the old assembly by brotherhoods of all its power.

Under these circumstances a more powerful assembly which at first excluded the patricians had its advantages. Such an assembly was called a *concilium*, and in it the Roman people were assembled by tribes. Every Roman citizen belonged to some tribe to which he or his ancestors had been assigned, but these tribes indicated no distinctions of blood or family; they were merely geographical divisions according to which soldiers were levied, the census taken, and taxes for war collected. Very early the Romans had inclined toward the group vote, for they found it convenient to vote by tribal grouping. This tribal council of the people (*Concilium plebis tributum*) seems gradually to have merged with another tribal assembly, to which the patricians belonged. It was called the *comitia tributa populi*.

Having shaken off the legal power of the Senate to control their action, the centuriate and the tribal assemblies became the lawmaking bodies of the Roman state. Eventually the people were also given voting rights in the centuriate assembly equal to those of the patricians and the wealthy. As a result the people were able to pass laws by which the assemblies gained the right to make laws, and in this way the people gradually secured a fairer share of the public lands and further social rights. Finally, and most important of all,

these new laws increased the rights of the people to hold office. In the end Roman citizens elected their plebeian neighbors as censors and quæstors, as judges and at last even as consuls, and they saw men of the people sitting in the Senate.

This progress of the people in power brought with it important new developments affecting both society and government. Roman citizens had a deep respect for government and for its officials. The Roman consul appeared in public attended by twelve men called *lictors*, bearing the symbols of state authority. Each man carried a bundle of rods (called *fascēs*¹), suggesting the consul's power to scourge the condemned, and from the midst of the rods rose an ax, symbolizing the consul's legal right to inflict the death penalty. The other officials of high rank were likewise attended by a smaller group of lictors. The consuls and all the higher officials wore white robes edged with purple, a costume which only these men had the right to wear. When a magistrate went out of office he might assume his official garment from time to time on feast days. There soon grew up a group of once plebeian families, thus distinguished by the public service of its members, to whom the Roman citizens looked up with great respect. When the voters were called upon to select their candidates, they preferred members of these eminent families, especially for the consulship. A new nobility was thus formed, made up of such illustrious families and the old patricians.

This situation directly affected the Senate, the members of which had formerly been appointed from among the patricians by the consuls. A new law, however, authorized the *censors* to make out the lists of senators, giving the preference to those who had been magistrates. Thus the new nobility of ex-magistrates, formerly plebeians, entered the Senate, bringing in fresh blood from the ranks of the people.

As a result of these changes the Senate was made up of the three hundred men of Rome who had gained the most experience in government and in public affairs. When the herald's trumpet echoed from the Forum, and the senators, responding

¹ It is from this Latin word that the well known modern Italian political terms *fascism* and *fascisti* have arisen.

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to the call, crowded into the modest assembly hall beside the Forum and took their seats, the consul called them to order. He was president of the Senate, and he and his colleague, the other consul, were the heads of the state, with more power than any senator possessed. From his chair on the platform the consul looked down into the strong faces of wise and sagacious men, many of whom had already held his high office and knew far more about its duties than he did. Moreover, while he was in office for only a year, the men confronting him held their seats in the Senate for life, and most of them had been conducting public business there for years. The result was that their combined influence, operating steadily for many years, was too strong for the consul. Instead of telling the senators of his own plans and of the laws he desired, he found himself listening to the proposals of the Senate and carrying out the will of the senators. As a result the consul became a kind of senatorial minister, carrying on the government according to instructions from the Senate.

In the matter of lawmaking a similar growth of the Senate's influence took place. Although the popular assemblies had the right to make laws, it was not in their power to *propose* a new law. They could vote upon it only after it had been proposed by a *magistrate*, especially by one of the tribunes, who were the presiding officers of the tribal assembly. The influence of the Senate on the magistrates was such that the magistrates discussed with the senators every law to be brought before the assemblies for adoption. The tribunes could stop the operation of any law, and hence the Senate had become accustomed to consult with them before a law was passed. The result was that the tribunes were given membership and seats in the Senate, and so added to the power and influence of that already powerful body.

By far the larger part of the Roman citizens lived too far away to come up to the city and vote. The small minority living in Rome, who could be present and vote at the meetings of the assemblies, were familiar with the faces of the senators and they well knew the wisdom, skill, and experience of these old statesmen. They knew also that there was a strong feeling

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of patriotism among the senators, and standing at the open doors of the Senate hall they had heard the voice of many a gray-haired ex-consul whom they revered, as it rang through the Forum, in eloquent support of some patriotic measure or in earnest summons to national defense. Feeling too their own ignorance of public affairs, the Roman citizens were not unwilling that important public questions should be settled by the Senate. Thus the Roman Senate became a large committee of experienced statesmen, guiding and controlling the Roman state. They formed the greatest council of rulers which ever grew up in the ancient world, or perhaps in any age. They were a body of aristocrats, and their control of Rome made it an aristocratic state, in spite of its republican form. We are now to watch the steady development and progress of Roman power under the wise and stable leadership of the Senate. We should bear in mind, however, that the Senate's power was a slow growth, continuing during the wars and conquests which we are now to follow.

The Expansion of the Roman Republic and the Conquest of Italy

It was a tiny nation which began its uncertain career after the expulsion of the Etruscan kings. The territory of the Roman Republic was the mere city with the adjacent fields for a very few miles around. On the other side of the Tiber lived the dreaded Etruscans, and on the Roman side of the river, all around the little republic, lay the lands of the Latin tribes, who had combined in what was called the Latin League. The league was independent and did not acknowledge itself subject to Rome. But in their own struggle with their enemies, the Latin tribes found the leadership of the city indispensable. The Latin League therefore made a perpetual treaty with Rome—a treaty uniting the league and the city in a combination for mutual defense under the leadership of Rome. But this arrangement produced only a loose union, not yet forming a unified nation. Nevertheless, the Roman Senate gave to the citizens of Latium privileges in Rome about equal to those of Roman citizens, and the Latins were

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therefore ready to fight for the defense of the city whose leadership they followed.

For two generations the new republic struggled for the preservation of its mere existence. This struggle against threatening enemies on all its frontiers, especially the Etruscans, was



FIG. 149. ETRUSCAN HELMET CAPTURED BY THE GREEKS OF SYRACUSE IN THEIR VICTORY OVER THE ETRUSCANS AT CUMÆ IN 474 B.C.

Hiero, the Greek tyrant of Syracuse, dedicated this helmet at Olympia as part of the spoil which he took from the Etruscans in his great naval victory of Cumæ. It is now in the British Museum, and it still bears the dedicatory inscription placed upon it by the Syracusan tyrant twenty-four hundred years ago

the motive power which stirred the little nation to constant effort, to vigorous life, and to steady growth. Fortunately for the Romans, within a generation after the foundation of the Republic the fleet of Syracuse utterly destroyed the Etruscan fleet (474 B.C.). Later the Etruscans were attacked in the rear by the Gauls, who were pouring over the Alpine passes into the valley of the Po and laying waste the Etruscan cities of the north. This weakening of the Etruscans at the hands of their enemies on both north and south probably saved Rome from destruction. It enabled the Romans to maintain a ten years' siege of Veii, a strong southern fortress of the Etruscans about ten miles from Rome. Strangely enough the other Etruscan cities did not come to the aid of Veii, and eventually the Romans captured and destroyed it (396 B.C.). At the same time the

Italic tribes surrounding Latium on the south, east, and north were constantly invading and plundering the fields and pastures of the Latin tribes and threatening the city. Rome beat off these marauders and, by establishing a group of colonies along the coast south of the Tiber, formed a buffer against such invasions from the south. By 400 B.C. or a little after, the Romans had conquered and taken possession of a fringe of new territory on all sides, which protected them from their enemies.

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In the new territory thus gained the Romans planted colonies of citizens, or they granted citizenship or other valuable privileges to the absorbed population. Roman peasants, obligated to bear Roman arms and having a voice in the government, thus pushed out into the expanding borders of Roman territory. This policy of *agricultural* expansion steadily and consistently followed by the Senate was irresistible, for it gave to Rome an ever-increasing body of brave and hardy citizen-soldiers, cultivating their own lands and ready at all times to take up the sword in defense of the state which shielded them. The Roman policy was thus in striking contrast with the narrow methods of the Greek republics, which jealously prevented outsiders from gaining citizenship. It was the steady expansion of Rome under this policy which in a little over two centuries after the expulsion of the Etruscan kings made the little republic on the Tiber mistress of all Italy.

The second century of Roman expansion opened with a fearful catastrophe which very nearly accomplished the complete destruction of the nation. In the first two decades around 400 B.C. the barbarian Gauls, who had been overrunning the territory of the Etruscans, finally reached the lower Tiber, and the Roman army which went out to meet them was completely defeated. The city, still undefended by walls, was entirely at their mercy. They entered at once (c. 390 B.C.), plundering and burning. Only the citadel on the Capitol hill held out against the barbarians. Long afterward Roman tradition told how even the citadel was being surprised at night by a party of Gauls who clambered up the heights, when the sacred geese, kept in a temple close by, aroused the garrison by their cackling and the storming party was repulsed. Wearied by a long siege of the citadel, the Gauls at length agreed to accept a ransom of gold and to return northward, where they settled in the valley of the Po. But they still remained a serious danger to the Romans.

As Rome recovered from this disaster, it was evident that the city needed fortifications, and for the first time masonry walls were built around it. This gave the city a strength it had

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not before possessed. It gained the southern territory of the Etruscans, now much weakened by the inroads of the Gauls, and it also seized new possessions in the Campanian plain. The high-handed manner in which Rome was now taking new lands seems to have alarmed even the Latin tribes, and they endeavored to break away from the control of the powerful walled city. In the two years' war which resulted the city was completely victorious, and the Roman Senate forced the defeated Latin tribes to break up the Latin League (338 B.C.). The Roman Senate then proceeded to make separate treaties with each of the Latin tribes and did not grant them as many privileges as formerly. Rome thus gained the undisputed leadership of the Latin tribes, which was at last to bring her the leadership of Italy.

The year 338 B.C., in which this important event took place, is a date to be well remembered, for it witnessed also the defeat of the Greek cities at the hands of Philip of Macedonia. In the same year, therefore, both the Greeks and the Latins saw themselves conquered and falling under the leadership of a single state—the Greeks under that of Macedonia, the Latins under that of Rome. But in Greece that leadership was in the hands of one man, who might and did perish; while in Italy the leadership of the Latins was in the hands of a whole body of wise leaders, the Roman Senate. In sixty-five years they were now to gain the leadership of all Italy.

Meantime another formidable foe, a group of Italic tribes called the Samnites, had been taking possession of the mountains which form the backbone of the Italian peninsula inland from Rome. They had gained some civilization from the Greek cities of the south, and they were able to muster a large army of hardy peasants, very dangerous in war, but they lacked the steadying and continuous leadership of a governing city like Rome. Some of them drifted down into the plains of Campania, where they captured Capua, one of the southern outposts of the Etruscans. Within forty years after the expulsion of the Gauls, the Samnites were in hostile collision with Rome. By 325 B.C. a fierce war broke out, which lasted with interruptions for a generation. The Romans lost several

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battles, and in one case were subjected by the Samnites to the ordeal of marching "under the yoke"—a humiliation which the Romans never forgot.¹

But the resources of the Roman Senate were not confined to fighting. They gained lands and established Roman colonies on the east of the Apennines and in the plain of Campania. From these new possessions they were able to attack the Samnites from both sides of the mountains. The Samnites attempted a combination of Rome's enemies against her. They succeeded in shifting their army northward and joining forces with both the Etruscans and the Gauls. All central and much of northern Italy was now involved in the war. In the mountains midway between the upper Tiber and the eastern shores of Italy the Roman army met and crushed the combined forces of the allies in a terrible battle at Sentinum (295 B.C.). This battle decided the future of Italy for over two thousand years. It not only gave the Romans possession of central Italy, but it made them the leading power in the whole peninsula.

Henceforth the Etruscans were unable to maintain themselves as a leading power. One by one their cities were taken by the Romans, or they entered into alliance with Rome. The Gallic barbarians were beaten off, and the stream of Gallic invasion which was thus forced back in northern Italy by Rome flowed over eastward and southward into the Balkan Peninsula, as we have seen. The settled Gauls, however, continued to hold the Po Valley, and the northern boundary of the Roman conquests was along the Arnus River, south of the Apennines. Southward the resistance of the Samnites was easily crushed within five years after the battle at Sentinum. They and the other leading peoples of southern Italy, with the exception of the Greeks there, were forced to enter the Roman alliance. The Romans were supreme from the Arnus to the Greek cities of southern Italy.

The three great rivals in the western world were now the Romans, the Greeks, and the Carthaginians. As for the home cities of the Greeks, they were under the successors of Alex-

¹ The defeated troops in token of their submission marched under a lance supported horizontally on two upright lances and called a "yoke."

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ander, fighting among themselves for possession of the fragments of his empire, while Rome was gaining the leadership of Italy. As for the western Greek colonies, four centuries of conflict among themselves had left them still a disunited group of cities fringing southern Italy and Sicily. They had long been fighting with the Italic tribes and other peoples of southern Italy, and a number of the Greek cities of the region had fallen. The survivors, alarmed at the threatening expansion of Roman power, now made another endeavor to unite, and called in help from the outside.

The leading city of the Greeks in southern Italy was Tarentum. Unable to secure effective aid from the now declining home cities of Greece, the men of Tarentum sent an appeal to Pyrrhus, the vigorous and able king of Epirus, just across from the heel of Italy. Pyrrhus fully understood the highly developed art of war as it had grown up with Epaminondas and Philip of Macedon. Besides Thessalian horsemen, the best cavalry in the world, he had secured from the Orient a formidable innovation in the form of fighting elephants. With an army of well-trained Greek infantry of the phalanx besides, and his well-known talent as a soldier, Pyrrhus was a highly dangerous foe. His purpose was to form a great nation of the western Greeks in Sicily and Italy. Such a nation would have proved a formidable rival of both Rome and Carthage.

Pyrrhus completely defeated the Romans at Heraclea in 280 B.C., and in the following year they were routed again at Asculum. Pyrrhus proceeded in triumph to Sicily, where he gained the whole island except the Carthaginian colony on the outermost western end (Lilybæum), which he could not capture for lack of a fleet. He seemed about to succeed in his effort to establish a powerful western Greek empire, when he met with serious difficulties. The Carthaginians, who saw a dangerous rival arising only a few hours' sail from their home harbor, sent a fleet to assist the Romans against Pyrrhus. When the ambassador of Pyrrhus arrived at Rome with proposals of peace, the Carthaginian fleet was at the mouth of the Tiber, and the Roman Senate resolutely refused to make peace while the army of Pyrrhus occupied Italian soil. At the

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same time the Greeks disagreed among themselves, as they usually did at critical times. Pyrrhus then withdrew from Sicily and, finding himself unable to inflict a decisive defeat on the Romans, he returned to Epirus (275 B.C.).

One by one the helpless Greek cities surrendered to the Roman army, and they had no choice but to accept alliance with the Romans. Thus ended all hope of a great Greek nation in the West. In two centuries and a quarter (500-275 B.C.) the tiny republic on the Tiber had gained the mastery of the entire Italian peninsula south of the Po Valley. There were now but two rivals in the Western Mediterranean world—Rome and Carthage. In following the inevitable struggle of these two for the mastery of the Western Mediterranean during the next two generations, we shall be watching the final conflict between the western wings of the two far-reaching racial lines, the Semitic and the Indo-European. But before we take up this struggle we must learn more about the character and the civilization of the great Roman power which thus grew up in Italy. These men who won the supremacy of Italy for the little republic on the Tiber were the first generation of Romans about whom sufficient information has survived to make us well acquainted with them.

CHAPTER XXIII

THE SUPREMACY OF THE ROMAN REPUBLIC IN ITALY AND THE RIVALRY WITH CARTHAGE

Italy Under the Early Roman Republic

AFTER the leadership of Italy had been gained by Rome, there were men still living who could remember the Latin war (ended 338 B.C.), when Rome had lost even the surrounding fields of little Latium. Now, sixty-five years later, the city on the Tiber was mistress of *all Italy*. The new power over a large group of cities and states, thus gained within a single lifetime, was exercised by the Roman Senate with the greatest skill and success. Had Rome *annexed* all the conquered lands and endeavored to rule them from Rome, the population of Italy would have been dissatisfied and constant revolts would have followed. How, then, was Italy to become a nation controlled by Rome?

The Romans began by granting the defeated cities a kind of citizenship. It entitled them to all the protection of the Roman state in carrying on commerce and business, to all the rights of every Roman citizen in the law courts, and, at the same time, to social privileges like that of intermarriage. But this citizenship did not entitle them to vote. In distant communities, however, no one felt the lack of this privilege, for in order to vote it was necessary to go to Rome. Cities and communities controlled by Rome in this way were called "allies." The protection of the powerful Roman state in carrying on business and commerce was of itself a very valuable advantage to the allies. They were therefore willing to place their troops entirely at the disposal of Rome, and also all their dealings with foreign peoples; for they still had full control of their own local internal affairs, except those of the army. In all this Rome wisely granted the different cities very different rights and laid upon them highly varied restrictions. Thus no two cities were likely to feel the same grievances or make common cause against Roman rule of Italy.

Rome, had, however, gradually annexed a good deal of territory to pay her war expenses and to supply her increasing numbers of citizens with land. Her own full citizens thus oc-

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cupied about one sixth of the territory of Italy. It consisted chiefly of the region between the Apennine Mountains and the sea, from Cære on the north to Capua and Cumæ on the south. It included likewise some important areas in the Apennines and on the Adriatic coast. It was furthermore Rome's policy to sprinkle Roman colonies through the territory of the allies. All Italy was thus more or less dotted with communities of Roman citizens. By these wise measures Rome gained and kept control of Italy.

Rome thus brought into a kind of unity what we may *geographically* call Italy; but an examination of its population will readily show us how far Italy really was from being a *nation*, even though controlled by Rome. Besides the Gauls, whose territory in the Po Valley had not yet been taken over by the Romans, there were the conquered Etruscans, who occupied a large part of northern Italy. In the central region were the Latins and the other Italic tribes. These tribes all spoke related dialects, which were, however, so different that no one tribe could understand any of the others. Finally, in the south were the Greek cities. There was therefore no common language in Italy, even among the Indo-Europeans, and this created a situation very different from that in Greece.

Neither did the peoples of Italy possess any common literary inheritance such as the Greeks had in the Homeric poems. Nothing in their history, like the Trojan War in that of the Greeks, had ever given them common traditions. Roman organization had created a kind of United States of Italy, which might after a long time slowly merge into a nation. Meantime these peoples, of course, had no feeling of patriotism toward Rome. Speaking different languages, so that they did not understand one another when they met, they long remained quite distinct.

In language the future nation was to be Latin, the tongue of the ruling city; geographically it comprised Italy; politically it was Roman.¹ When we consider Rome from the point of view of *civilization*, however, we are obliged to add a fourth

¹ Compare the similar application of three names to our own country. Politically we are the United States, geographically we are commonly called America, while our language is English.

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name. For, as time went on, Italy was to become in civilization more and more Greek. The Greek cities extended as far north as the plains of Campania, where Rome had early taken Capua, in size the second city of Italy. In the days of the war with Pyrrhus and after the Roman soldiers had beheld with wonder and admiration the beautiful Greek temples in such cities as Pæstum and Tarentum. Here for the first time they saw also fine theaters, and they must have attended Greek plays, of which they understood little or nothing. But the races and athletic games in the handsome stadium of such a Greek city required no interpretation in order to be understood by the sturdy Roman soldiers.



FIG. 150. A ROMAN DENARIUS OF SILVER

After the capture of the Greek cities of southern Italy the Romans began the coinage of silver (268 B.C.)

In southern Italy the Romans had taken possession of the western fringe of the great Hellenistic world whose wonderful civilization we have already discussed. The Romans at once felt the superiority of this new world of cultivated life. When

a highborn Roman family like that of the Scipios wished to have carved a beautiful sarcophagus for their father, they employed a Greek sculptor from the south. At the same time the temples of Rome began to be laid out on an *oblong* ground plan, like those of the Greeks, and no longer on a *square* ground plan like those developed by the Etruscans. As Roman power expanded this conquest of the Romans by Greek civilization made greater and greater progress, but it never went so far as to remove all traces of Etruscan civilization. On the contrary, the foundation of Roman civilization remained Etruscan to the end.

It was as yet chiefly in commerce and in business that Greek influences were evident. Greek merchants from the southern cities now enjoyed Roman protection when they traded in Rome. Greek silver money appeared in greater quantities after

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the capture of the Greek cities. Copper coins were no longer sufficient for Roman business; and not long after the fall of Tarentum, in 268 B.C., Rome issued her first silver coin. Just as Athens had once done, so Rome now began to feel the influence of money, and a moneyed class, largely merchants, arose. They were not manufacturers, as at Athens; and, although possessing some industries, Rome was never noted as a great industrial center.

Rome and Carthage as Commercial Rivals

The old policy of *agricultural* expansion had slowly brought Rome the leadership *within* Italy. A new policy of *commercial* expansion was to bring her into conflict with the Mediterranean world *outside* of Italy. The farmers had looked no farther than the shores of Italy, but the transactions of the Roman merchants reached out beyond those shores. When Roman ships issued from the Tiber they entered the Tyrrhenian Sea, which was inclosed on the south by Sicily and the Carthaginian coast of Africa. A glance at the map (p. 460) shows us how Rome and Carthage faced each other across this triangular sea, where both were now carrying on extensive business.

It was indeed a dangerous rival which confronted Rome across the Tyrrhenian Sea. In the veins of the Carthaginians flowed the blood of those hardy desert people of Arabia, the Semitic caravaneers who had made the market places of Babylon the center of ancient eastern trade two thousand years before Rome ever owned a ship. The fleets of their Phœnician ancestors had coursed the Mediterranean in the days when the Stone Age barbarians of Italy were eagerly looking for the merchant of the East and his metal implements. While Rome was an obscure trading village on the Tiber, and before the Greeks ever entered these waters, the Phœnician merchants, the earliest explorers of the Western Mediterranean, had perceived the advantageous position of the commanding projection where the African coast thrusts out toward Sicily. Here, on the northern edge of the region now called Tunis, they had planted the city which had become the commercial queen

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of the Western Mediterranean and the most powerful rival of Rome.

This advantageous situation gave Carthage unrivaled commercial opportunities. Gradually, as her trade carried her in both directions, she had gained the coast eastward to the frontiers of the Greek city of Cyrene, and westward to the Atlantic. Her merchants absorbed southern Spain, with its profitable silver mines, and they gained control of the import of British tin by way of the Strait of Gibraltar. Outside of this strait their settlements extended northward along the coast of Spain and southward along the Atlantic coast of Africa to the edge of the Sahara. In this direction Hanno, one of their fearless captains, explored the coast of Africa as far as Guinea.

It was only the incoming of the Greeks which had prevented the Carthaginians from taking possession of the Mediterranean islands upon which their splendid harbor looked out. They usually held a large part of Sicily, the west end of which was almost visible from the housetops of Carthage. They planted their colonies in the islands of Sardinia and Corsica, and they had ports in the Balearic Islands, between Sardinia and Spain. They closed the Strait of Gibraltar and the ports of the islands *to ships from all other cities*. Foreign ships intruding in these waters were promptly rammed and sunk by Carthaginian warships.

Unlike Rome, the military power of Carthage, supported by the profits from trade, was built up entirely on a basis of money, with which, as long as she prospered, she could support a large mercenary army. She had no farmers cultivating their own land, from whom she could draw an army of citizen-soldiers as did Rome. The rich and fertile region of Tunis just south of Carthage had indeed been taken by the Carthaginians from its native owners. Here the merchant princes of the city developed large and beautiful estates, worked by slaves; but such lands, supporting no small farmers, furnished no troops for the army.

This was a serious weakness in the organization of the Carthaginian state. The rulers of the city never trusted the army, made up as it was of foreigners, and they always felt some

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distrust even toward their own generals, although they were, of course, born Carthaginians. The fear lest the generals should endeavor to make themselves kings of Carthage caused much friction between the government and the Carthaginian commanders and was frequently a cause of weakness to the nation. Although there were two elective magistrates called Judges at the head of the state, Carthage was really governed by a group of merchant nobles, a wealthy aristocracy whose members formed a Council in complete control. They were what the Greeks called an oligarchy, but they were energetic and statesmanlike rulers. Centuries of shrewd guidance on their part made Carthage a great state, far exceeding in power any of the Greek states that ever arose, not excluding Athens.

But Carthage remained in civilization an oriental power. Wherever her works of art are dug up today, they show all the earlier limitations of oriental art and seem to have been little influenced by the Greeks. Only in Sicily did Carthaginian merchants yield to Greek influence, take up coinage, and issue silver money. In Carthage herself they retained the old oriental commercial use of bars of precious metal. As her business grew, however, her merchants found it necessary to have some convenient medium of exchange, and they issued leather money, the earliest predecessor of paper money, stamped with the seal of the state, guaranteeing its value. In literature their great explorer Hanno wrote an account of his exploration of the Atlantic coast of Africa; and Mago, one of their statesmen, who organized and developed the great farming district of Tunis, wrote a treatise on agriculture which the Roman Senate had translated into Latin. It became the standard book on agriculture in Italy.

In matters of household equipment and city building the Carthaginians were quite the equals of the Greeks. The city of Carthage itself was large and splendid. It was in area three times as large as Rome. Behind wide docks and extensive piers of masonry, teeming with ships and merchandise, the city spread far inland, with spacious markets and busy manufacturing quarters humming with industry. Beyond the dwellings of the poorer craftsmen and artisans rose the stately

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houses of the wealthy merchants, with rich and sumptuous tropical gardens. Around the whole swept imposing walls and massive fortifications, inclosing the entire city and making its capture almost an impossibility. Behind the great city, outside the walls, stretched a wide expanse of waving palm groves and tropical plantations, dotted with the luxurious country houses of the splendid commercial lords of Carthage who were to lead the coming struggle with Rome.

In the fourth century B.C., before Rome had gained the leadership of Italy, when the Roman merchants were still doing only a small business and the Roman nobility was contemptuous of trade, the Senate had made a treaty with Carthage.¹ By this treaty all ports in the Western Mediterranean of which the Carthaginians had complete control were closed to Roman trade. The capture of the Greek cities of Italy by the Romans had left the Greeks of Sicily to face the power of Carthage entirely alone. In times past they had done this with great success (p. 463); but now, unable to unite against Carthage, they were slowly yielding, and the Carthaginians were steadily pushing eastward and absorbing Sicily. The merchants of Italy looked over at the busy harbors of Sicily, where so much profitable trade was going on, and it filled them with growing impatience that they were not permitted to do business there. With increasing vexation they realized that Rome had gained the supremacy of Italy and pushed her frontiers to the southernmost tip of the peninsula, only to look across and find that the merchant princes of Carthage had made the Western Mediterranean a Carthaginian sea.

Indeed, Carthage was gaining a position which might cut off Rome from communication with even her own ports on the Adriatic side of Italy. To reach them, Roman ships must pass through the Strait of Messina between Italy and Sicily. The advance of Carthage in Sicily might enable her at any time to seize the Sicilian city of Messina and close this strait to Roman ships. We can understand the dread with which

¹ The historian Polybius writes of a similar treaty made with Carthage about one hundred and fifty years earlier.

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Italian merchants looked southward, thinking of the day when Carthaginian warships in the harbor at Messina would stop all traffic between the west coast of Italy and the Adriatic.

The Roman Senate without doubt shared these apprehensions. Many a Roman senator must have asked himself the question: What would be Rome's chances of success in a struggle with the mighty North-African commercial empire? Rome had little or no navy. The Roman army had been barely able to maintain itself against a modern Hellenistic commander like Pyrrhus. The ancient regulation drawing the soldiers only from among the owners of land had formerly limited the size of the army, but it was greatly increased in size by the admission of the new class of men having property in money. The introduction of pay for citizens in the army had also increased the possible length of military service among a people still chiefly made up of farmers obliged to return home to plow, sow, and reap. The Romans could thus put a citizen army of over three hundred thousand men into the field. Besides the troops made up of Roman citizens, the principle was adopted of having each army include about an equal number of troops drawn from the allies. This plan, therefore, doubled the number of avail-



FIG. 151. A ROMAN SOLDIER OF THE LEGION

The figure of the soldier is carved upon a tombstone erected in his memory by his brother. His offensive weapons are his spear (*pilum*), which he holds in his extended right hand with point upward, and his heavy short sword (*gladius*), which he wears girded high on his right side. As defensive equipment he has a helmet, a leather corselet stopping midway between the waist and knees, and a shield (*scutum*) carried on his left arm

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able troops. Thus enlarged the Roman army far exceeded in size any army ever before organized in the Mediterranean world.

In arms and tactics the Romans had been able to make some improvements in the Hellenistic art of war. The spear was now employed by the Romans only as the battle opened, when it was hurled into the ranks of the enemy at short range. After this the battle was fought by the Romans with short swords, which were much more easily handled at close quarters than long spears. At the same time the Romans had likewise improved the phalanx, which had thus far been a massive unit, possessing as a whole little flexibility—it had no joints. The Romans gave it joints and flexibility by cutting it up in both directions, that is, lengthwise and crosswise.

They divided the phalanx lengthwise into three divisions,¹ one forming the front, one the middle, and one the rear. Each division was about six men deep, and there was only a narrow space between the divisions. The front division was made up of the young and vigorous troops, while the older men were placed in the other two divisions. If the steady old troops behind saw that a gap was being made in the front division, it was the business of the second division to advance at once and fill the gap. This made it necessary to cut up the divisions crosswise into short sections, so that a section could advance without carrying the whole division forward. Such a section of a division had a front about twenty men long, and, being six men deep, each section of a division had one hundred and twenty men. These sections were called *maniples*. Each maniple in advancing to fill a gap before it was like a football “back” when he springs forward to stop a gap in the line before him. But it is important to notice that thus far all three divisions of the phalanx were invariably kept together; they were *inseparable*. The middle and rear divisions were always only *supports of the front division immediately before them*. It had not yet occurred to the Romans to shift the middle or rear division, as football backs are shifted, to fight

¹ The word “division” in this discussion is, of course, not employed in a modern military sense.

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facing in another direction, or to post them in another part of the field, leaving the first division to fight unsupported. When a great Roman, during the struggle with Carthage, discovered the possibility of thus shifting the middle and rear divisions, a new chapter in the art of war began.

For purposes of mustering and feeding an army, the Romans divided it into larger bodies, called *legions*, each containing usually forty-five hundred men, of whom three hundred were cavalry, twelve hundred were light-armed troops, while the three thousand forming the body of the legion were the heavy-armed men making up the three divisions just described. Each maniple of one hundred and twenty men was divided into two centuries of sixty men each, for a "century" soon ceased always to contain a hundred men. Each century had a commander called a centurion. A centurion and his century roughly corresponded to our captain and his company.

Notwithstanding these improvements, the Romans did not at first see the importance of a commander-in-chief of long experience—a man who made warfare his calling and had become a professional military leader like the Hellenistic commanders. Hence the Romans intrusted their armies without hesitation to the command of their consuls, who as presidents of the Republic had often never had any experience in military leadership. Moreover, a consul might be leading the troops just on the eve of battle and find himself deprived of command by the expiration of his term of office. In the Samnite Wars this difficulty had shown the Romans the necessity of extending a consul's military power under such circumstances. When this was done he was called a proconsul. But the Romans were still without professional generals like Xenophon. At the same time the introduction of pay for officers and soldiers had made extended service possible, and an experienced body of lower officers such as the centurions had grown up.

In military discipline the Romans surpassed all other peoples of ancient times, for even among the Greek troops there was great lack of discipline. We hear of a Roman father who ordered his son to be executed in the presence of the army,

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because the young man had, in disobedience of orders, accepted single combat with an enemy and slain him. Even an ex-consul, having won a victory after receiving orders from the Dictator not to give battle, was condemned to death by the Dictator as the legal consequence of disobedience to a superior. It was only with the greatest difficulty that he was saved by his influential friends. In accordance with the strict system maintained in all their operations it was the invariable practice of a Roman army when it halted to construct a square fortified camp, surrounded by a ridge of earth bearing a stockade of wooden posts driven into the crest of the ridge. In plan this camp was a descendant of the old prehistoric pile village of northern Italy.

CHAPTER XXIV

THE ROMAN CONQUEST OF THE WESTERN MEDITERRANEAN WORLD

The Struggle with Carthage: the Sicilian War, or First Punic War

WHATEVER might be the risks involved in a struggle with Carthage, the Romans were soon convinced that it could not be avoided. During a siege of Messina at the hands of the Syracusans one party in the besieged place called in the aid of the Romans, while another party appealed to Carthage. The result was that a Carthaginian garrison quickly occupied the citadel of Messina, and the Carthaginians were then in command of the Strait of Messina. The Romans had long hesitated, but now they took the memorable step, and a Roman army, responding to the appeal of Messina, left the soil of Italy and crossed the sea for the first time in Roman history. The struggle with Carthage had begun (264 B.C.).

An alliance with Syracuse soon gave the Romans possession of eastern Sicily, but they were long unable to make much progress into the central and western portion of the island. The chief reason for this was the lack of a strong war fleet. The Romans, therefore, adopting a naval policy like that of Themistocles, determined to build a fleet. The Senate rapidly pushed the building of the new fleet, and in the fifth year of the war it put to sea for the first time. It numbered a hundred and twenty battleships, of which a full hundred were large, powerful vessels with five banks of oars.

In spite of inexperience the Roman fleet was victorious in two successive battles off the coast of Italy. It looked as though the war would be quickly over. The Senate, however, finding that the legions made little progress in Sicily, determined to invade Africa and strike Carthage at home. The invasion was at first very successful, but its progress was unwisely interfered with by the Senate, which recalled one of the consuls with many of the troops. The result was that the remaining consul, with his reduced army, was disastrously defeated. Then one Roman fleet after another was destroyed by heavy storms at sea, and one of them was badly defeated by the Carthaginians.

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The Romans thus lost their newly won command of the sea and were long unable to make any progress in the war.

Year after year the struggle dragged on, while Hamilcar Barca, the Carthaginian commander, was plundering the coasts of Italy with his fleet. The treasury at Rome was empty, and the Romans were at the end of their resources; but by private contributions they succeeded in building another fleet, which put to sea in 242 B.C. with two hundred battleships of five banks of oars. The Carthaginian fleet was defeated and broken up (241 B.C.), and as a result the Carthaginians found

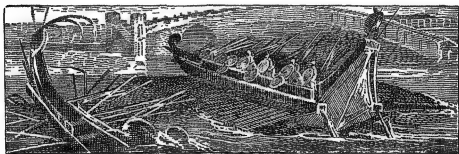


FIG. 152. WALL-PAINTING FROM POMPEII, SHOWING ROMAN WARSHIPS

Probably a battle scene for the wreck of another warship is visible at the left. Notice the two steering *oars*, one at each side of the stern—a device found on Nile ships three thousand years earlier. The rudder had not yet developed from these steering oars

themselves unable to send reinforcements across the sea to their army in Sicily.

They were therefore at last obliged to accept hard terms of peace at the hands of the Romans. The Carthaginians were to give up Sicily and the neighboring islands to Rome, and to pay the Romans as war damages the sum of thirty-two hundred talents (over three and a half million dollars) within ten years. Thus in 241 B.C., after more than twenty-three years of fighting, the first period of the struggle between Rome and Carthage ended with the victory of Rome.

The struggle had been carried on till both contestants were completely exhausted. Both had learned much in the art of war, and Rome had become a sea power. She had also taken a step which forever changed her future and altered her des-

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tiny; for the first time she held territory outside of Italy, and from this step she was never able to withdraw. It has been compared with the action of the United States in taking Porto Rico and the Philippines; for in gaining interests and responsibilities across the sea, a nation is at once thrown into conflict with other powers having similar interests, and this

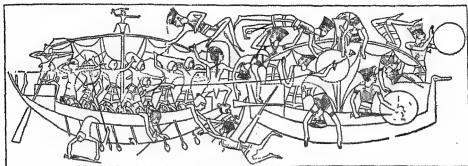


FIG. 153. EGYPTIAN GRAPPLING IRONS, THE ANCESTOR OF THE ROMAN CORVUS ("CROW")

The scene above is taken from the naval battle between the Egyptians and the northern Mediterranean peoples (Fig. 101). From an Egyptian boat (at left) a soldier throws into a boat full of northerners (at the right) a rope to which are attached four large iron hooks. The foremost Egyptian soldiers are poised already to board the enemy craft, in order quickly to begin a hand-to-hand conflict as soon as the grappling irons have taken hold. This is, so far as is known, the earliest representation of such a boarding device. The Romans ascribed their success against the Carthaginians, in spite of inexperience, to a new boarding grappler which they invented and called a "crow" (*corvus*). It consisted of a heavy upright timber which was made to fall over, with the end on the enemy's rail, where an iron hook attached to the end of the "crow" grappled and held the opposing craft until the Romans could climb over into it. In the hand-to-hand fighting which followed, the sturdy Romans more than made up for their inexperience in seamanship

conflict of interests never reaches an end, but easily and usually leads from one war to another.

The Hannibalic War (Second Punic War) and the Destruction of Carthage

Both the rivals now devoted themselves to increasing their strength, nor did Rome hesitate to do so at the expense of Carthage. Taking advantage of a revolt among the hired Carthaginian troops in Sardinia, the Romans accepted an in-

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vation from these mercenaries to invade both Sardinia and Corsica; and in spite of protests from Carthage, only three years after the settlement of peace Rome took possession of these two islands. Rome now possessed three island outposts against Carthage. Some years later the Romans were involved in a serious war by an invasion of the Gauls from the Po Valley. The Gauls were disastrously defeated, and their territory was seized by the Romans without granting the Gauls any form of citizenship. Thus Roman power was extended northward to the foot of the Alps, and the entire peninsula from the Alps southward was held by Rome.

To offset this increase of Roman power and to compensate for the loss of the three large islands, the Carthaginian leaders turned toward Spain. Here Hamilcar, the Carthaginian general, planned to secure the wealth of the silver mines, to enlist the natives in the army, and thus to build up a power able to meet that of Rome. He died before the completion of his plans, but they were taken up by his gifted son Hannibal, who extended Carthaginian rule in Spain as far north as the Ebro River. Although only twenty-four years of age, Hannibal was already forming colossal plans for a bold surprise of Rome in her own territory, which by its unexpectedness and audacity should crush Roman power in Italy.

Rome, busily occupied in overthrowing the Gauls, had been unable to interfere with the Spanish enterprises of Carthage. She had, however, secured an agreement that Carthage should not advance northward beyond the Ebro River. To so bold and resolute a leader as Hannibal such a stipulation was only an opportunity for a frontier quarrel with Rome in Spain. In the tremendous struggle which followed he was the genius and the dominating spirit. It was a colossal contest between the *nation* Rome and the *man* Hannibal. We may therefore well call it the Hannibalic War, though it is more commonly known as the Second Punic War.

While the Roman Senate was demanding that the leaders at Carthage disavow his hostile acts, Hannibal, with a strong and well-drilled army of about forty thousand men, was already marching northward along the east coast of Spain. Sev-

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eral reasons led him to this course. He knew that since the Sicilian war the defeated Carthaginian fleet would be unable to protect his army if he tried to cross by water from Carthage and to land in southern Italy. Moreover, his cavalry, over six thousand strong, was much too numerous to be transported by sea. In southern Italy, furthermore, he would have been met at once by a hostile population, whereas in northern Italy there were the newly conquered Gauls, burning for revenge on the Romans, their conquerors. Hannibal intended to offer them an opportunity for that revenge by enlistment in his ranks. Moreover, he had reports of dissatisfaction among the allies of Rome also, and he believed that by an early victory in northern Italy he could induce the allies to forsake Rome and join him in a war for independence which would destroy Roman leadership in Italy. For these reasons, while the Roman Senate was planning to invade Spain and Africa, they found their own land suddenly invaded by Hannibal from the north.

By clever maneuvering at the Rhone, Hannibal avoided the Roman army, which had arrived there on its way to Spain. The crossing of the Rhone, a wide, deep, and swift river, with elephants and cavalry and the long detour to avoid the Romans so delayed Hannibal that it was late autumn when he reached the Alps (218 B.C.). Overwhelmed by snowstorms, struggling over a steep and dangerous trail (sometimes so narrow that the rocks had to be cut away to make room for the elephants), looking down over dizzy precipices, or up to snow-covered heights where hostile natives rolled great stones down upon them, the discouraged army of Hannibal toiled on day after day, exhausted, cold, and hungry. At every point along the straggling line where help was most needed, the young Carthaginian was always present, encouraging and guiding his men. But when they issued from the Alpine pass, perhaps Mt. Cenis, into the upper valley of the Po, they had suffered such losses that they were reduced to some thirty-four thousand men.

With this little army the dauntless Carthaginian youth had entered the territory of the strongest military power of the

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time—a nation which could now call to her defense over seven hundred thousand men, citizens and allies. From this vast number Rome could recruit army after army; but Hannibal, on the other hand, as long as Carthage did not control the sea, could expect no reënforcements from home except through Spain. A military success was necessary at once in order to arouse the hopes of the Gauls and secure recruits from among them.

Hannibal, who was in close contact with a number of Greeks, was thoroughly acquainted with the most highly developed methods of warfare. The exploits of Alexander, who had died a little over a century before Hannibal's invasion of Italy, were familiar to him, and it is not impossible that the fascinating story of Alexander's campaigns was read to the young Carthaginian as he lay with his Greek companions around the camp fires in Italy. Furthermore, we recall that Roman consuls, commanding the Roman armies, were simply magistrates like our mayors or civil presidents, often without much more knowledge of handling an army than has a city mayor in our time. Gifted with little imagination, blunt and straightforward, courageous and eager to meet the enemy at once, the Roman consuls were no match for the crafty young Carthaginian.

By skillful use of his cavalry, in which the Romans were weak, Hannibal at once won two engagements in the Po Valley. The Gauls began to flock to his standards, but they were raw, undisciplined troops. He was still outside the barrier of Roman fortresses defending the Apennines, and this he must not fail to pierce without delay. By early spring, therefore (217 B.C.), amid fearful difficulties which would have broken the courage of most commanders, Hannibal successfully passed the belt of Roman strongholds blocking the roads through the Apennines. Even after he had crossed the Arnus, the Roman consul Flaminius had no notion of the Carthaginian advance, though he soon learned that the Carthaginians were between him and Rome. Nevertheless, on the shores of Lake Trasimene, Hannibal easily surprised the army of the unsuspecting consul on the march, ambushed the legions in both

THE HANNIBALIC WAR

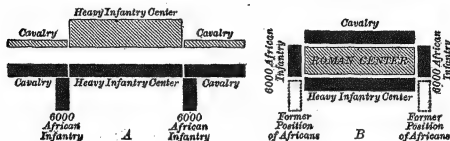
front and rear, and cut to pieces the entire Roman army, so that only a handful escaped and the consul himself fell. But a few days' march from Rome, Hannibal might now have advanced directly against the city; but he had no siege machinery and his forces were not numerous enough for the siege of so strong a fortress. Moreover, his cavalry, in which he was superior to the Romans, would have been useless in a siege. He therefore desired another victory in the hope that the allies of Rome would revolt and join him in attacking the city.

Hannibal therefore marched eastward to the Adriatic coast, where he secured numerous horses, much needed by his cavalry, and found also plentiful provisions, besides an opportunity to drill his Gallic recruits. At this dangerous crisis the Romans appointed a Dictator, a stable old citizen named Fabius, whose policy was to wear out Hannibal by refusing to give battle and by using every opportunity to harass the Carthaginians. This policy of caution and delay did not meet with popular favor at Rome. The people called Fabius the "Laggard" (*Cunctator*), a name which ever afterward clung to him; and the new consuls elected for 216 B.C. were urged to take action and destroy the Carthaginian army without more delay. They therefore recruited an army of nearly seventy thousand men and pushed southward toward the heel of the Italian peninsula to meet Hannibal. The Carthaginian deftly outwitted them and, marching to Cannæ (216 B.C.), captured the Roman supplies. The consuls were then obliged to give battle or retire for more provisions.

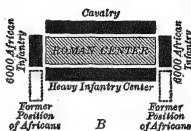
With their fifty-five thousand heavy-armed infantry the consuls were almost twice as strong as Hannibal, who had but thirty-two thousand such troops. On the other hand, Hannibal had about ten thousand horse against six thousand of the Roman cavalry, while both armies were about equally strong in light-armed troops. Varro, the Roman consul, had been merely a successful business man at Rome. He drew up his heavy-armed troops in a deep mass in the center, with a short front. Had he spread them out, so that their superior numbers might form a longer front than that of Hannibal,

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they might have enfolded and outflanked the Carthaginian army. Both armies divided their cavalry, that it might form the two wings. Instead of massing all his heavy-armed troops in the center to meet the great mass of the Roman center, Hannibal took out some twelve thousand of his heavy-armed African infantry in two bodies of six thousand each and stationed them in a deep column behind each of his cavalry wings (plan A, below).



Position of the two armies
as the battle began
black = Carthaginians
shaded = Romans



Roman center surrounded
after the Roman cavalry
was routed and the two
African divisions were
pushed forward

PLAN OF THE BATTLE OF CANNÆ

Hannibal's stronger cavalry put to flight the Roman horse forming both wings. Then as his well-trained horsemen turned back to attack the heavy mass of the Roman center in the rear, he knew that it was too late for the Romans, perceiving their danger, to retreat and escape, for they were caught between the Carthaginian center before them and the Carthaginian cavalry behind them. Only the ends of the trap were open. Then came a great moment in the young Carthaginian's life. With unerring judgment, just at the proper instant, he gave the orders which closed up the ends of the trap he had so cleverly prepared. The two bodies of Africans which he had posted behind the cavalry wings, on each side, pushed quietly forward till they occupied positions at each end of the fifty-five thousand brave Romans of the center, who were thus inclosed on all sides. What ensued was simply a slaughter of the doomed Romans, lasting all the rest of the day. When night closed in the Roman army was annihilated. Ex-consuls,

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senators, nobles, thousands of the best citizens of Rome had fallen in this frightful battle. Every family in Rome was in mourning. Of the gold rings worn by Roman knights as an indication of their rank, Hannibal is reported to have sent a bushel to Carthage. Even in modern times pieces of armor have been picked up on the battlefield.

Thus this masterful young Carthaginian, the greatest of Semite generals, within two years after his arrival in Italy and before he was thirty years of age, had defeated his giant antagonist in four battles and destroyed three of the opposing armies. He might now count upon a revolt among the Roman allies. Within a few years southern Italy, including the Greek cities, and even Syracuse in Sicily forsook Rome and joined Hannibal. Only some of the southern Latin colonies held out against him. To make matters worse for Rome, immediately after Cannæ Hannibal sent messengers to Macedonia, and one of the later Philips then reigning there agreed to send help to the Carthaginians in Italy.

In all this Hannibal was displaying the judgment and insight of a statesman combined with amazing ability to meet the incessant demands of the military situation. This required him to lay out campaigns, to drill the inexperienced new recruits, to insure supplies of food and fresh horses for his army, while at the same time he was forced also to find the money with which to pay his turbulent and dissatisfied mercenaries. In carrying out all this work he was untiring, and his eye was everywhere. It was no uncommon thing for some private soldier to wake in the morning and find his young general sleeping on the ground by his side. There was a consuming fire of desire in his soul to save Carthage; and now his glorious victories were drawing together the foes of Rome

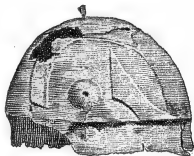


FIG. 154. CARTHAGINIAN HELMET PICKED UP ON THE BATTLEFIELD AT CANNÆ

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in a great combination which he believed would bring about the destruction of his country's hated antagonist.

But opposing the burning zeal of a single gifted soul were the dogged resolution, the ripe statesmanship, the unshaken organization, and the seemingly inexhaustible numbers of the Romans. It was a battle of giants for the mastery of the world; for the victor in this struggle would without any question be the greatest power in the Mediterranean. Had the successors of Alexander in the Hellenistic Eastern Mediterranean discerned the nature of this gigantic struggle in Italy and been able to combine against Rome, they might now have crushed her forever. But the Roman Senate, with clever statesmanship, made an alliance with the Greeks, thus stirring up a revolt in Greece against the Macedonians and preventing them from furnishing help to Hannibal. In spite of Hannibal's victories, the steadiness and fine leadership of the Roman Senate held central Italy loyal to Rome. Although the Romans were finally compelled to place arms in the hands of slaves and mere boys, new armies were formed. With these forces the Romans proceeded to besiege and capture the revolting allied cities one after another. Even the clever devices of Archimedes during a desperate siege did not save Syracuse from being recaptured by the Romans (212 B.C.).

Capua likewise, the second city of Italy, which had gone over to his cause, was besieged by the Romans in spite of all Hannibal's efforts to drive them away. As a last hope he marched upon Rome itself, and with his bodyguard rode up to one of the gates of the great city, whose power seemed so unbroken. For a brief time the two antagonists faced each other, and many a Roman senator must have looked over the walls at the figure of the tremendous young Carthaginian who had shaken all Italy as with an earthquake. But they were not to be frightened into offers of peace in this way, nor did they send out any message to him. His army was not large enough to lay siege to the greatest city of Italy, nor had he been able to secure any siege machinery; and he was obliged to retreat without accomplishing anything. Capua was thereupon captured (211 B.C.) by the Romans and punished without mercy.

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The hitherto dauntless spirit of the young Carthaginian at last began to feel the crushing weight of Roman confidence. When he had finally been ten years in Italy, he realized that unless powerful reënforcements could reach him his cause was hopeless. His brother Hasdrubal in Spain had gathered an army and was now marching into Italy to aid him. At the Metaurus River, in the region of Sentinum, where the fate of Rome had once before been settled (p. 483), Hasdrubal was met by a Roman army. He was completely defeated and slain (207 B.C.). To the senators, waiting in keenest anticipation at Rome, the news of the victory meant the salvation of Italy and the final defeat of an enemy who had all but accomplished the destruction of Roman power. To Hannibal, anxiously awaiting tidings of his brother and of the needed reënforcements, the first announcement of the disaster and the crushing of his hopes was the head of Hasdrubal hurled into the Carthaginian camp by a Roman messenger.

For a few years more Hannibal struggled on in the southern tip of Italy, the only territory remaining of all that he had captured. Meantime the Romans, taught by sad experience, had given the command of their forces in Spain to Scipio, one of the ablest of their young leaders. He had routed the Carthaginians and driven them entirely out of Spain, thus cutting off their chief supply both of money and of troops. In Scipio the Romans had at last found a general with the masterful qualities which make a great military leader. He demanded of the Senate that he be sent to Africa to invade the dominions of Carthage as Hannibal had invaded those of Rome.

By 203 B.C. Scipio had twice defeated the Carthaginian forces in Africa, and Carthage was obliged to call Hannibal home. He had spent fifteen years on the soil of Italy, and the great struggle between the almost exhausted rivals was now to be decided in Africa. At Zama, inland from Carthage, the final battle of the war took place (202 B.C.). Hannibal, having insufficient cavalry, foresaw that his weak cavalry wings would be defeated by Scipio's opposing heavy bodies of horsemen. When, as he expected, the Roman cavalry wings disappeared in pursuit of his own fleeing horsemen, the wings of both

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armies were cleared away for one of those unexpected but carefully planned maneuvers by which the great Carthaginian had destroyed the Roman army at Cannæ. From behind his line Hannibal moved out two divisions in opposite directions, elongating his own line beyond the ends of the Roman line, which he intended to inclose on either side. In football language, Hannibal had ordered his backs to spread out and to execute a play around both the Roman ends at once. The fate of two empires was trembling in the balance as Hannibal's steel trap thus extended its jaws on either side to enfold the Roman army.

But behind the Roman army there was a mind like that of Hannibal. The keen eye of the Roman commander discovered the flash of moving steel behind the Carthaginian lines. He understood the movement and at once grasped the danger which threatened his army. As a result of Cannæ, Scipio had long before abandoned all Roman tradition and had taught his front division to fight without the support of the rear divisions behind them. In football language again, he too had learned to shift his backs and had taught the line to hold without them. The shrewd young Roman commander therefore gave his orders without hesitation. For the first time in history the rear divisions behind the front of a Roman center left the front division to fight alone. As quietly as on a parade march they parted to the left and right and, marching behind the fighting line in opposite directions, they took up their posts, extending the Roman front at either end where at first the cavalry wings had been. When Hannibal's spreading divisions pushed out beyond the Roman ends, where they were expected to carry out their "around-the-end" movements, they found facing them a wall of Roman steel, and the battle continued in two parallel lines longer than before. The great Carthaginian had been foiled at his own game by an equally great Roman. When the Roman cavalry returned from their pursuit and fell on the Carthaginian flank, Hannibal beheld his lines crumbling and giving way in final and complete defeat.

In this great battle we see the conclusion of a long and re-

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markable development in the art of war, from the wild disorder of entirely undisciplined fighting to the formation of a heavy phalanx of disciplined men, the earliest trained fighting team as it appeared in the Orient. Then in Europe came the oblique battle front which Philip and Alexander combined with the onset of swiftly moving cavalry. Finally the deep phalanx as used by the Greeks was no longer regarded by the Romans as a rigid, indivisible fighting unit, but it was broken up into a fighting line in front and a group of shifting backs behind. On the field of Zama, Scipio and Hannibal had advanced to a new stage in the art of warfare and had created what is now known as "division tactics"—the art of manipulating an army on the field in *divisions* shifted behind the line of battle as a skillful football leader shifts his backs, trusting to the line to hold while he does so.

The victory of Rome over Carthage made Rome the leading power in the whole ancient world. In the treaty (201 B.C.) which followed the battle of Zama, the Romans forced Carthage to pay ten thousand talents (over \$11,000,000) in fifty years and to surrender all her warships but ten triremes. But, what was worse, she lost her independence as a nation, and according to the treaty she could not make war anywhere without the consent of the Romans. Although the Romans did not annex her territory in Africa, Carthage had become a vassal state.

Hannibal had escaped after his lost battle at Zama. Although we learn of his deeds chiefly through his enemies, the story of his dauntless struggle to save his native country, begun when he was only twenty-four and continued for twenty years, reveals him as one of the greatest and most gifted leaders in all history—a lion-hearted man, so strong of purpose that only a great nation like Rome could have crushed him. Indeed, Rome now compelled the Carthaginians to expel Hannibal, and, a man of fifty, he went into exile in the East, where we shall find him stirring up the successors of Alexander to combine against Rome.

Such was the commercial ability of the Carthaginians that they continued to prosper even while paying the heavy tribute

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with which Rome had burdened them. Meantime, the new mistress of the Western Mediterranean kept an anxious eye on her old rival. Even the stalwart Romans remembered with uneasiness the invasion of Hannibal. Cato, a famous old-fashioned senator, was so convinced that Carthage was still a danger to Rome that he concluded all his speeches in the Senate with the words, "Carthage must be destroyed." For over fifty years more the merchants of Carthage were permitted to traffic in the Western Mediterranean, and then the

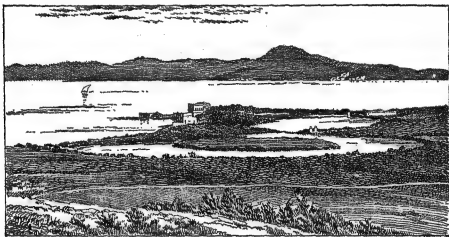


FIG. 155. THE HARBORS OF CARTHAGE AS THEY ARE TODAY

Of the city destroyed by the Romans almost nothing has survived. It was rebuilt under Julius Caesar, but not a great deal remains even of the Roman city

iron hand of Rome was laid upon the doomed city for the last time. To defend herself against the Numidians behind her, Carthage was finally obliged to begin war against them. This step, which the Romans had long been desiring, was a violation of the treaty with Rome. The Senate seized the opportunity at once and Carthage was called to account. In the three years' war (Third Punic War) which followed, the beautiful city was captured and completely destroyed (146 B.C.). Its territory was taken by Rome and called the Province of Africa. A struggle of nearly one hundred and twenty years had resulted in the annihilation of Rome's only remaining rival in the West.

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Thus the fourfold rivalry in the Western Mediterranean, which had long included the Etruscans and the Carthaginians, the Greeks and the Romans, had ended with the triumph of the once insignificant village above the prehistoric market on the Tiber. Racially, the western wing of the Indo-European line had proved victorious over that of the Semite line. The Western Mediterranean world was now under the leadership of a single great nation, the Romans, as the Eastern Mediterranean world had once been under the leadership of the Macedonians. We must now turn back and follow the dealings of Rome with the Hellenistic-oriental world of the Eastern Mediterranean, which we left after it had attained the most highly refined civilization ever achieved by ancient man.

CHAPTER XXV

WORLD DOMINION AND DEGENERACY

The Roman Conquest of the Eastern Mediterranean World

WHILE the heirs of Alexander were carrying on their ceaseless feuds, plots, wars, and alliances in the Eastern Mediterranean, as we have seen them doing down to about 200 B.C., the vast power of Rome had been slowly rising in the West. The serious consequences of Rome's growth, and especially of her expansion beyond the sea, were now evident. The Roman Senate could not allow any state on the Mediterranean to develop such strength as to endanger Rome in the way Carthage had done during the Hannibalic War. For this and other reasons the western giant was now to overshadow the whole Hellenistic world of the East and finally to draw the three great states of Alexander's heirs into its grasp. Let us see what the reasons for the first collision were.

Hannibal had induced Macedonia to combine with him against Rome. This hostile step could not be overlooked by the Romans after the Hannibalic War. Philip, the Macedonian king, was a gifted ruler and an able military commander like his great ancestor, the father of Alexander the Great, a hundred and fifty years earlier. The further plans of this later Philip filled the Senate with anxiety. For he had arranged a combination between himself and Antiochus the Great (the third of the name), the Seleucid king of Syria. By this alliance the two were to divide the dominions of Egypt between them. Because of what he had already done, and also because of what he would do if allowed to go on and gain greatly increased power, the Romans were now obliged to turn eastward and crush Philip of Macedon.

The Greek states had no reason to support the rule of Macedonia over them; Antiochus was too busy seizing the Asiatic territory of Egypt to send any help to Macedonia; and hence, a year after the close of the Hannibalic War, Philip found himself, without strong allies, face to face with a Roman army. By his unusual skill as a commander he evaded the Roman force for some time. But in the end the massive Macedonian phalanx, bristling with long spears, was obliged to

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meet the onset of the Roman legions, with their deadly short swords and the puzzling divisions behind the lines shifting into unexpected positions which the phalanx was not flexible enough to meet. On the field of Cynoscephalæ ("dogs' heads"), in 197 B.C., the Macedonian army was disastrously routed and the ancient realm of Alexander the Great became a vassal state under Rome. As allies of Rome, the Greek states were then granted their freedom by the Romans.

This war with Macedon brought the Romans into conflict with Antiochus the Great, the Seleucid king, who held a large part of the vast empire of Persia in Asia; for Antiochus now endeavored to profit by Philip's defeat and to seize some of Philip's former possessions which the Romans had declared free. A war with this powerful Asiatic empire was not a matter which the Romans could view without great anxiety. Moreover, Hannibal, expelled from Carthage, was now in Greece with Antiochus, advising him. In spite of the warnings and urgent counsels of Hannibal, Antiochus threw away his opportunities in Greece until the Roman legions maneuvered him back into Asia Minor, whither the Romans followed him, and there the great power of the West for the first time confronted the motley forces of the ancient Orient as marshaled by the successor of Persia in Asia.

The conqueror of Hannibal at Zama was with the Roman army to counsel his brother, another Scipio, consul for the year and therefore in command of the legions. There was no hope for the undisciplined troops of the Orient when confronted by a Roman army under such masters of the new tactics as these two Scipios. At Magnesia, the West led by Rome overthrew the East led by the dilatory Antiochus (190 B.C.), and the lands of Asia Minor eastward to the Halys River submitted to Roman control. Under the ensuing treaty Antiochus was not permitted to cross the Halys River westward or to send a warship west of the same longitude. Within twelve years (200 to 189 B.C.) Roman arms had reduced to the condition of vassal states two of the three great empires which succeeded Alexander in the East—Macedonia and Syria. As for Egypt, the third, friendship had from the beginning

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existed between her and Rome. A little over thirty years after a Roman army had first appeared in the Hellenistic world, Egypt acknowledged herself a vassal of Rome (168 B.C.).

Although defeated, the Eastern Mediterranean world long continued to give the Romans much trouble. The quarrels of the eastern states among themselves were constantly carried to Rome for settlement. It became necessary to destroy Macedonia as a kingdom and to make her a Roman province. At the same time Greek sympathy for Macedonia was made the pretext for greater severity toward the Greeks. Many were carried off to Italy as hostages, and among them no less than a thousand noble and educated Achæans were brought to Rome. When in spite of this the Achæan League rashly brought on a war with Rome, the Romans applied the same methods which they were using against Carthage. The same year which saw the destruction of Carthage witnessed the burning of Corinth also (146 B.C.). Greek liberty was of course ended; and, while a city of such revered memories as Athens might be given greater freedom, those Greek states whose careers of glorious achievement in civilization we have followed were reduced to the condition of Roman vassals.

It was little more than three generations since the republic on the Tiber had taken the fateful step of beginning the conflict with Carthage for the leadership of the West. That struggle had led her into a similar conflict for the leadership of the East. There were old men still living who had talked with veterans of the Sicilian War with Carthage, and the grandsons of the Romans who had fought with Hannibal had burned Carthage and Corinth at the end of the great wars. For nearly a century and a quarter (beginning 264 B.C.) one great war had followed another, and the Roman Republic, beginning these struggles as mistress of Italy only, had in this short space of time (from great-grandfather to great-grandson) gained the political leadership of the civilized world.

The Roman Senate had shown eminent ability in conducting the great wars; but now, having gained the supremacy of the Mediterranean world, Rome was faced by the problem of devising successful government for the vast dominions which

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she had so quickly conquered. In extent they would have reached entirely across the United States. To organize such an empire was a task like that which had been so successfully accomplished by Darius, the organizer of the Persian Empire. We shall find that the Roman Senate utterly failed in the effort to organize the new dominions. The failure had a most disastrous influence on the Romans themselves and, together with the ruinous effects of the long wars on Italy, finally overthrew the Roman Republic—an overthrow in which Rome as a nation almost perished. Let us now glance at the efforts of Rome to govern her new dominions and then observe the effect of the long wars and of world power on the Romans and their life.

Roman Government and Civilization in the Age of Conquest

The Romans had at first no experience in governing their conquered lands, as the United States had none when it took possession of the Philippines. Most of the conquered countries the Romans organized as provinces, somewhat after the manner of the provinces of the old Persian Empire. The people of a province were not permitted to maintain an army, but they were obliged to pay taxes and, lastly, to submit to the uncontrolled rule of a Roman magistrate who was *governor* of the province. It was chiefly the presence and power of this governor which made the condition of the provinces beyond the sea so different from that of the Roman possessions in Italy. The regulations for the rule of the provinces were made in each case by the Roman Senate, and on the whole they were not oppressive. But the Senate made no provisions for compelling the Roman governor to obey these regulations.

Such a governor, enjoying unlimited power like that of an oriental sovereign, found himself far from home with Roman troops at his elbow awaiting his slightest command. He had complete control of all the taxes of the province, and he could take what he needed from its people to support his troops and the expenses of his government. He usually held office for a single year and was generally without experience in provincial government. His eagerness to gain a fortune in his

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short term of office and his complete ignorance of the needs of his province frequently reduced his government to a mere system of looting and robbery. The Senate soon found it necessary to have laws passed for the punishment of such abuses; but these laws were found to be of little use in improving the situation.

The effects of this situation were soon apparent in Italy. In the first place, the income of the Roman government was so enormously increased that it was no longer necessary to collect direct taxes from Roman citizens. This new wealth was not confined to the state. The spoils from the wars were usually taken by the victorious commanders and their troops. At the same time the provinces were soon filled with Roman business men. There were contractors, called publicans, who were allowed to collect taxes for the state at a great profit or gained the right to work state lands. We remember the common references to these publicans in the New Testament, where they are regularly classified with "sinners." With them came Roman money-lenders, who enriched themselves by loaning money at high rates of interest to the numerous provincials who were obliged to borrow to pay the extortionate taxes claimed by the Roman governors. The publicans were themselves money-lenders, and all these men of money plundered the provinces worse than the greedy Roman governors themselves. As these people returned to Italy, there grew up a wealthy class such as had been unknown there before.

Their ability to buy resulted in a vast import trade to supply the demand. From the Bay of Naples to the mouth of the Tiber the sea was white with Roman ships converging on the docks of Rome. The men who controlled all this traffic became wealthy merchants. To handle all the money in circulation, banks were required. During the Hannibalic War the first banks appeared at Rome, occupying a line of booths on each side of the Forum. After 200 B.C. these booths gave way to a fine basilica like those which had appeared in the Hellenistic cities (p. 434). Here the new wealthy class met to transact financial business, and here large companies were formed for the collection of taxes and for taking government

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contracts to build roads and bridges or to erect public buildings. Shares in such companies were daily sold, and a business like that of a modern stock exchange developed in the Forum.

Under these influences Rome changed greatly. With increasing wealth and growing population, there was a greater demand for dwellings.

Rents at once rose, and land in the city became more valuable. Apartments for rent became a good form of paying investment; and, as the value of property rose, a larger return in rents could be secured by increasing the number of floors. Hence owners began to erect tall buildings with several stories, though these ancient "skyscrapers" were never as tall as ours. It became necessary to limit their height by law, as we do; and when badly built, as they sometimes were, they fell down, as they have been known to do in our own cities.

When a returned governor of Africa put up a showy new house, the citizen across the way who still lived in his father's old house began to be dissatisfied with it. It was built of sun-dried brick, and, like the old settler's cabin of early America, it had but one room. In this room all the household life centered. The stool and spinning outfit of the wife and the bed of the citizen were each assigned to a corner, while the kitchen was simply



FIG. 156. AN OLD ROMAN ATRIUM HOUSE

There was no attempt at beautiful architecture, and the bare front showed no adornment whatever. The opening in the roof, which lighted the atrium, received the rainfall of a section of the roof sloping toward it, and this water collected in a pool built to receive it in the floor of the atrium below (Fig. 157, B). The tiny area, or garden, shown in the rear was not common. It was here that the later Romans added the Hellenistic peristyle (Fig. 158)

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another corner where the family meals were cooked over an open fire. There was no chimney, and the smoke passed out of a square hole in the middle of the roof. The whole place was so begrimed by smoke that the room was called the *atrium*, a word perhaps connected with the Latin word for "black." Here, then, the family took their meals, here they slept, and

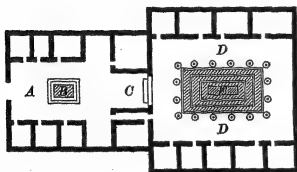


FIG. 157. PLAN OF A ROMAN HOUSE WITH PERISTYLE

The earliest Roman house had consisted of a single room, the atrium (*A*), with the pool for the rain water (*B*). Then a small alcove, or lean-to, was erected at the rear (*C*) as a room for the master of the house. Later the bedrooms on each side of the atrium were added. Finally, under the influence of Greek life, the garden court (*D* and Fig. 158), with its surrounding colonnaded porch (peristyle) and a fountain in the middle (*E*), was built at the rear. Then a dining-room, a sitting-room, and bedrooms were added, which opened on this court, and, being without windows, they were lighted from the court through the doors. In town houses it was quite easy to partition off a shop, or even a whole row of shops, along the front or side of the house, as in the Hellenistic house (Fig. 135). The houses of Pompeii were almost all built in this way

here, in full view of pots and kettles, beds and tables, the master of the house received his friends and transacted his affairs with business or official callers.

The Roman citizen of the new age had walked the streets of the Hellenistic cities. Indeed, he had long before been familiar with the comfort, luxury, and beauty with which the Greek houses of Capua and Naples were filled. As his means increased, therefore, the wealthy Roman added to and enlarged his house. Often there was built a second story, to which the bedrooms and perhaps the din-

ing-room could be shifted. The atrium then became a large and stately reception hall where the master of the house could display his wealth in statues, paintings, and other works of art—the trophies of war from the East.

The old Roman houses had been unadorned and had con-

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tained nothing but the bare necessities. Carthaginian ambassadors had been much amused to recognize at successive dinners in Rome the same silver dishes which had been loaned around from house to house. Not long before the Carthaginian was an ex-consul had been fined for having more than ten pounds' weight of silverware in his house. A generation later a wealthy Roman was using in his household silverware which weighed

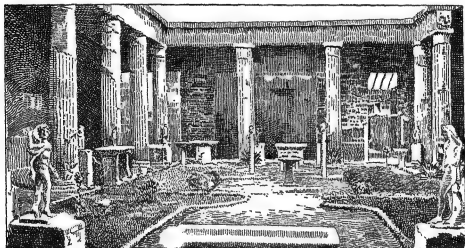


FIG. 158. PERISTYLE OF A POMPEIAN HOUSE

We must imagine ourselves standing with our backs toward the atrium (having immediately behind us the room *C* in Fig. 157). We look out into the court, the garden of the house (Fig. 157, *D*). The marble tables and statues and the marble fountain basin in the middle (Fig. 157, *E*), just as we see them here in the drawing, were all found by the excavators in their places, as they were covered by volcanic ashes over eighteen hundred years ago. Here centered the family life, and here the children played about the court, brightened with flowers and the tinkling music of the fountains

some ten thousand pounds. One of the Roman conquerors of Macedonia entered Rome with two hundred and fifty wagon-loads of Greek statues and paintings. The general who crushed the Ætolians carried off over five hundred bronze and marble statues, while the destroyer of Carthage filled all Rome with Greek sculptures. A wealthy citizen in even so small a city as Pompeii paved a dining alcove with a magnificent mosaic picture of Alexander in battle, which had once formed a floor in a splendid Hellenistic house in Alexandria. The finest furni-

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ture, hangings, and carpets of the East adorned the houses of the wealthy in Rome.

All those conveniences which we have found in the Hellenistic dwellings were likewise quickly introduced, such as pipes for running water, baths, and sanitary conveniences. The more elaborate houses were finally equipped with tile pipes conducting hot air for warming the important rooms, the

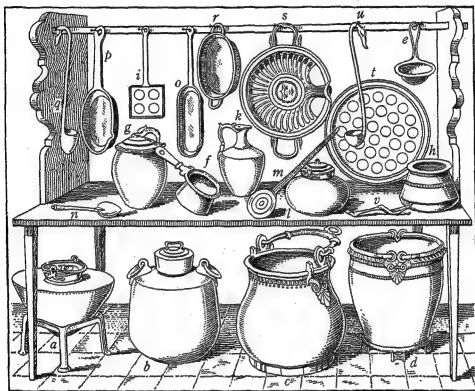


FIG. 159. BRONZE KITCHEN UTENSILS EXCAVATED AT POMPEII

earliest system of hot-air heating yet found. The kitchen was furnished with beautiful bronze utensils, far better than those commonly found in our own kitchens. On social occasions the food on the table included imported delicacies and luxuries, purchased at enormous expense. A jar of salted fish from the Black Sea cost seventy-five or eighty dollars, and the old-fashioned senator Cato, in a speech in the Senate, protested against such luxury, stating that "Rome was the only city in the world where such a jar of fish cost more than a yoke of oxen."

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Such luxury required a great body of household servants. There was a doorkeeper at the front door (he was called "janitor" from the Latin word *janua*, meaning "door"), and from the front door inward there was a servant for every small duty in the house, even to the attendant who rubbed down the master of the house after his bath. Almost all these menials were slaves, but it was not always possible to secure a slave as cook, and a wealthy Roman would pay as much as five thousand dollars a year for a really good cook.

While the effect of all this luxury introduced from the East was on the whole very bad, nevertheless the former plain, matter-of-fact, prosaic life of the Roman citizen was stimulated and refined both at home and in the Senate hall by the most beautiful creations of Greek genius. Even while eating his dinner, the commonplace citizen of Pompeii sat looking at the heroic death of the Persian nobles of Darius (Fig. 132).

A Roman senator returning from Alexandria could not but feel that Rome, in spite of some new and modern buildings, was very plain and unattractive, with its simple temples and old public buildings; and he realized that Alexandria was the greatest and most splendid city in the world. Roman emulation was aroused and forms of Hellenistic architecture, like the basilica on the Forum, were beginning to appear in Rome. It was not long, too, before a Greek theater appeared, improved by the Romans with awnings to keep out the hot sunshine, a curtain in front of the stage, like ours, and seats in the orchestra circle where once the Greek chorus had sung.

At the close of the Sicilian War (241 B.C.) a Greek slave named Andronicus, who had been taken as a lad by the Romans when they captured the Greek city of Tarentum, was given his freedom by his master at Rome. Seeing the interest of the Romans in Greek literature, he translated the *Odyssey* into Latin as a schoolbook for Roman children. For their elders he likewise rendered into Latin the classic tragedies which we have seen in Athens, and also a number of Attic comedies. This worthy Greek, Andronicus, was the first literary man in Europe to attempt artistic translations possessing literary finish. He was therefore, the founder of the art of lit-

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erary translation. Through his work the materials and the forms of Greek literature began to enter Roman life.

The Romans had been accustomed to do very little in the way of educating their children. There were no schools at first, but the good old Roman custom had been for the father to instruct his own children. Even when schools arose, there was no literature for the Roman lads to learn, as Greek boys had learned Homer and the other poets. The Roman father's respect for law and order led him to have his son taught the "Twelve Tables" of the law and recite them to the school-master, as English-speaking children were once taught the Ten Commandments. Such schools had been very poorly equipped; some of them, indeed, were held in the open air in a side street or a corner of the Forum. At best they had met in a bare room belonging to a dwelling house, and there were no schoolhouses.

Gradually parents began to send their children to the schools which the freed Greek slaves of Rome were beginning to open there. Moreover, there was here and there a household which possessed an educated Greek slave, like Andronicus, who might become the tutor of the children, giving regular instruction and teaching his pupils to read from the new primer of Andronicus, as we may call his Latin translation of Homer. Now and then Greek teachers of renown appeared and lectured in Rome. Young Roman nobles thus gained the opportunity of studying rhetoric and public speaking, which they knew to be of great practical use in the career of public office to which they all aspired. Indeed, it was not uncommon for a young Roman of station to complete his higher education at Athens.

As Rome gained control of Greece, the mingling of Greek and Roman life was increasingly intimate. When a thousand of the leading Achæans were brought to Rome as hostages (p. 514), there was among them a Greek statesman of great refinement and literary culture named Polybius. He was taken into the family of the Scipios, traveled about with them on their great campaigns, and occupied a position of dignity and respect. He witnessed the destruction of both Carthage and Corinth, and finally wrote an immortal history, in Greek, of

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the great Roman wars. Such cultivated Greeks had a great influence on the finer Romans like the Scipios. Polybius tells how he stood with the younger Scipio and watched the burning of Carthage, while his young Roman lord burst into tears and quoted Homer's noble lines regarding the destruction of Troy.

Such familiarity with the only literature known to the Romans, such daily and hourly intimacy with cultivated Greeks, aroused the impulse toward literary expression among the Romans themselves. To be sure, the Latins, like all peasant peoples, had had their folk songs and their simple forms of verse, but these natural products of the soil of Latium soon disappeared as the men of Latin speech felt the influence of an already highly finished literature. Latin literature, therefore, did not develop along its own lines from native beginnings, as did Greek literature, but grew up on the basis of a great inheritance from abroad. Indeed, we now see, as the Roman poet Horace said, that Rome, the conqueror, was herself conquered by the civilization of the Greeks.

Poets and writers of history now arose in Italy, and educated Romans could read of the great deeds of their ancestors in long epic poems modeled on those of Homer. In such literature were gradually recorded the picturesque legends of early Rome—the story of Romulus and Remus and similar tales—extending down through the early kings (p. 467, note). It is from these sources, now no longer regarded as history, that the early history of Rome used to be drawn. The Greek comedies of Menander (p. 447) attracted the Romans greatly; imitating these, the new Latin play writers, especially Plautus (died about 184 B.C.) and Terence (died about 159 B.C.), produced very clever comedies caricaturing the society of Rome, to which the Romans listened with uproarious delight. Their production on the stage led to the highly developed theater buildings which we have already mentioned.

As the new Latin literature grew, papyrus rolls bearing Latin works were more and more common in Rome. Then publishers, in back rooms filled with slave copyists, began to appear in the city. One of the Roman conquerors of Macedon

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brought back the books of the Macedonian king and founded the first private library in Rome. Wealthy Romans were now providing library rooms in their houses. A group of literary men arose, including the finest of the Roman leaders, and no man could claim to belong to this cultivated world without acquaintance with a well-stocked library of Greek and Latin books. Such Romans spoke Greek almost if not quite as well as Latin. These educated men were finally in sharp contrast with the uneducated mass of the Roman people, and there thus arose the two classes, educated and uneducated—a distinction unknown in the days of the early farmer Republic.

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The new life of Greek culture and luxury brought with it many evils. Even the younger Scipio, an ardent friend of Greek literature and art, expressed his pained surprise at finding Roman boys in a Greek dancing school, learning unwholesome dances, just as many worthy people among us disapprove of the new dances now widely cultivated in America. Cato, one of the hardiest of the old-fashioned Romans, denounced the new culture and the luxury which had come in with it. As censor he had the power to stop many of the luxurious new practices, and he spread terror among the showy young dandies and ladies of fashion in Rome. He and other Romans like him succeeded in passing law after law against expensive habits of many kinds, like the growing love of showy jewelry among the women, or their use of carriages where they formerly went on foot. But such laws could not prevent the slow corruption of the people. The old simplicity, purity, and beauty of Roman family life was disappearing, and divorce was becoming common. The greatest days of Roman character were past, and Roman power was to go on growing without the restraining influence of old Roman virtue.

This was especially evident in the lives of the uneducated and poorer classes also. To them, as indeed to the vast majority of all classes, Greek civilization was chiefly attractive because of the numerous luxuries of Hellenistic life. The common people had no comprehension of Greek civilization. At

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the destruction of Corinth, Polybius saw Roman soldiers shaking dice on a wonderful old Greek painting which they had torn down from the wall and spread out on the ground like a piece of tattered awning. When a cultivated Roman thought to gain popular favor by arranging a program of Greek instrumental music at a public entertainment, the audience stopped the performance and shouted to the musicians to throw down their instruments and begin a boxing match! Contrast this with the Athenian public in the days of Pericles!

It was to Roman citizens with tastes like these that the leaders of the new age were obliged to turn for votes and for support in order to gain office. To such tastes, therefore, the Roman nobles began to appeal. Early in the Sicilian War with Carthage there had been introduced the old Etruscan custom of single combats between condemned criminals or slaves, who slew each other to honor the funeral of some great Roman. These combatants came to be called gladiators, from a Latin word *gladius*, meaning "sword." The delight of the Roman people in these bloody displays was such that the officials in charge of the various public feasts, without waiting for a funeral, used to arrange a long program of such combats in the hope of pleasing the people and thus gaining their votes and securing election to future higher offices.

These barbarous and bloody spectacles took place at first within a temporary circle of seats, which finally became a great stone structure especially built for the purpose. It was called an amphitheater, because it was formed by placing two (*amphi*) theaters face to face (Fig. 172). Soon afterward combats between gladiators and wild beasts were introduced. The athletic contests which had so interested the Greeks were far too tame for the appetite of the Roman public. The chariot race, however, did appeal to the Romans, and they began to build enormous courses surrounded by seats for vast numbers of spectators. These buildings they called circuses.

The common people of Rome were thus gradually debased and taught to expect such public spectacles, sometimes lasting for days, as their share of the plunder from the great conquests.

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At the same time, as their poverty increased, the free food once furnished them by the wealthy classes far exceeded what private donors were able to give. It was therefore taken up by the state, which arranged regular distributions of grain to the populace. Vicious as this custom was, it was far from being so great an evil as the bribery which the candidates for office now secretly practiced. Laws passed to prevent the practice were of slight effect. The only Roman citizens who could vote were those who attended the assemblies at Rome, and henceforth we have only too often the spectacle of a Roman candidate controlling the government that ruled the world by bribing the comparatively small group of citizens present at meetings of the assemblies.

All these practices enormously increased the expenses of a political career. The young Roman, who formerly might have demonstrated his ability and his worthy character in some minor office as a claim upon the votes of the community, was now obliged to borrow money to pay for a long program of gladiatorial games. In secret he might also spend a large sum in bribing voters. If elected he received no salary, and in carrying on the business of his office he was again obliged to meet heavy expenses. For the Roman government had never been properly equipped with clerks, bookkeepers, and accountants; that is, the staff of public servants whom we call the civil service. The newly elected official, therefore, had to supply a staff of clerks at his own expense. Even a consul sat at home in a household room turned into an office and carried on government business with his own clerks and accountants, of whom one was usually a Greek.

The Roman politician now sought office in order that through it he might gain the influence which would bring him the governorship of a rich province. If he finally gained his object, he often reached his province burdened with debts incurred in winning elections in Rome. But the prize of a large province was worth all it cost. Indeed, the consulship itself was finally regarded as merely a stepping-stone to a provincial governorship. When a retired provincial governor returned to Rome, he was no longer the simple Roman of the good old

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days. He lived like a prince and surrounded himself with royal luxury. These men of self-interest, who had held the supreme power in a province, were a menace to the Republic, for they had tasted the power of kings without the restraints of Roman law and Roman republican institutions to hamper them.

But the evils of the new wealth were not less evident in the *country*. It was not thought proper for a Roman senator or noble to undertake commercial enterprises or to engage in any business. The most respectable form of wealth was land. Hence the successful Roman noble bought farm after farm, which he combined into a great estate or plantation. The capitalists who had plundered the provinces did the same. Looking northward from Rome, the old Etruscan country was now made up of extensive estates belonging to wealthy Romans of the city. Only here and there were still to be found the little farms of the good old Roman days. Large portions of Italy were in this condition. The small farm seemed in a fair way to disappear as it had done in Greece.

It was impossible for a wealthy landowner to work these great estates with free, hired labor. Nor was he obliged to do so. From the close of the Hannibalic War onward the Roman conquests had brought to Italy great numbers of captives of war from Carthage, Spain, Gaul, Macedonia, Greece, and Asia Minor. These unhappy prisoners were sold as slaves. The coast of the Adriatic opposite Italy alone yielded one hundred and fifty thousand captives. An ordinary day laborer would bring about three hundred dollars at auction, a craftsman or a good clerk was much more valuable, and a young woman who could play the lyre would bring a thousand dollars. The sale of such captives was thus enormously profitable. We have already seen such slaves in the households at Rome. The estates of Italy were now filled with them.

Household slavery was usually not attended with much hardship, but the life of the slaves on the great plantations was little better than that of beasts. Worthy and free-born men from the Eastern Mediterranean were branded with a hot iron like oxen, to identify them forever. They were herded at night in cellar barracks, and in the morning were driven like half-

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starved beasts of burden to work in the fields. The green fields of Italy, where sturdy farmers once watched the growing grain sown and cultivated by their own hands, were now worked by wretched and hopeless creatures who wished they had never been born. When the supply of captives from the wars failed, the Roman government winked at the practices of slave pirates, who carried on wholesale kidnapping in the Ægean and Eastern Mediterranean for years. They sold the victims in the slave market at Delos, whence they were brought by Roman merchants to Italy.

Thus Italy and Sicily were fairly flooded with slaves. The brutal treatment which they received was so unbearable that at various places in Italy they finally rose against their masters. Even when they did not revolt, they were a grave danger to public safety. The lonelier roads of Italy were infested by slave herdsmen, lawless ancient cowboys who robbed and slew and in many districts made it unsafe to live in the country or travel the country roads. The conditions in Sicily were worse than in Italy. In central and southern Sicily the revolting slaves gathered, some sixty thousand in number, slew their masters, captured towns, and set up a kingdom. It required a Roman consul at the head of an army and a war lasting several years to subdue them.

During the uprising of the slaves in Sicily the small farm owners, *free men*, went about burning the fine villas of the wealthy plantation proprietors. The slave rebellion therefore was a revelation of the hatred not only among the slaves but also among the poor farming class of *freemen*—the hatred toward the rich landowners felt by *all* the lower classes in the country, slave or free. The great conquests and the wealth they brought in had made the rich so much richer and the poor so much poorer that the two classes were completely thrust apart, and they no longer had any common life. Italy was divided into two great social classes dangerously hostile to each other. The bulk of the population of Italy had formerly been small farmers, as we have seen. Let us examine the effect of the great wars on the small farmers.

War seemed a great and glorious thing when we were fol-

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lowing the brilliant victories of Hannibal and the splendid triumph of Scipio at Zama. But now we are to see the other side of the picture. Never has there been an age in which the terrible and desolating results of war have so tragically revealed the awful cost of such glory. The happy and industrious families cultivating the little farms which dotted the green hills and plains of Italy had now been helplessly scattered by the storms of war. The campaigns of Hannibal left southern Italy desolate far and wide, and much of central Italy was in little better condition. These devastated districts left lying waste were never again cultivated, and slowly became pasture lands. In regions untouched by invasion, fathers and elder sons had been absent from home for years holding their posts in the legion, fighting the battles which brought Rome her great position as mistress of the world. If the soldier returned he often found the monotonous round of farm duties much too tedious after his adventurous life of war abroad. Leaving the plow, therefore, he returned to his place in the legion to resume the exciting life of war and plunder under some great leader whom he loved. Home life and wholesome country influences were undermined and broken up. The mothers, left to bring up the younger children alone, saw the family scattered and drifting away from the little farm, till it was left forsaken.

Too often, as the returning soldier approached the spot where he was born, he no longer found the house that had sheltered his childhood. His family was gone and his little farm, sold for debt, had been bought up by some wealthy Roman of the city and absorbed into a great plantation like those which the Romans had found surrounding Carthage. His neighbors, too, had disappeared and their farms had likewise gone to enlarge the rich man's great estate. Across the hills on a sunny eminence he saw the stately villa, the home of the Roman noble who now owned the farms of all the surrounding country. He cursed the wealth which had done all this, and wandered up to the great city to look for free grain from the government, to enjoy the games and circuses, and to increase the poor class already there.

Or, if he found his home and his little farm uninjured and

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was willing to settle down to work its fields as of old, he was soon aware that the hordes of slaves now cultivating the great plantations around him were producing grain so cheaply that when he had disposed of his harvest he would not receive enough for it to enable him and his family to live. The markets of Italy were moreover filled with cheap grain from Sicily, Africa, and Egypt. With this imported grain, often given away by the government, he could not compete, and slowly he fell behind; he borrowed money, and his debts increased. Forced to sell the little farm at last, he too wandered into Rome, where he found thousands upon thousands of his kind, homeless, embittered, and dependent upon the state for food.

The sturdy farmer-citizens who had made up the bulk of the citizenship of Rome, the yeomanry from whom she had drawn her splendid armies—these men who had formed the very substance of the power upon which the Roman Senate had built up its world empire—were now perishing. After the Macedonian wars the census returns showed a steady decline in the number of citizens of the Republic in Italy. At the same time there was serious discontent among the cities of the allies in Italy because they had never been given full citizenship. They saw the government of a world empire in the hands of a corrupt Senate and a small body of more and more brutalized citizens at Rome, and they demanded their share in the control of the great empire to whose armies they had contributed as many troops as the citizens of the Republic had done.

The wealth and power which Roman world dominion had gained had thus brought Rome and Italy to the verge of destruction. Nor was the situation any better in the most civilized portions of the empire outside of Italy, and especially in Greece. Under the large plantation system, introduced from Asia Minor, where it had grown up under the Persians, the Greek farmers had disappeared, as those of Italy were now beginning to do. Add to this condition the robberies and extortions of the Roman taxgatherers and governors, the continuous slave raids of the Ægean pirates, whose pillaging and kidnaping the Roman Republic criminally failed to prevent,

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the shift of Greek commerce eastward, and we have reasons enough for the destruction of business, of agriculture, and of prosperity in the Greek world.

But that wondrous development of higher civilization which we found in the Hellenistic world was likewise showing signs of decline. The sumptuous buildings forming the great home of science in Alexandria now represented little more than the high aims once cherished and supported by the Macedonian kings of Egypt. For when such state support failed, with its salaries and pensions to scientists and philosophers, the line of scientists failed too. Hence we see how largely science in the Hellenistic Age was rooted in the treasures of the Hellenistic kings, rather than in the minds of the Greek race as it had been of old, when for sheer love of knowledge the Greek philosopher carried on his studies without such support.

The Mediterranean was now the home of Greek civilization in the East and of Roman civilization in the West, but the failure of the Roman Senate to organize a successful government for the empire they had conquered—a government even as good as that of Persia under Darius—had brought the whole world of Mediterranean civilization perilously near destruction. In the European background, beyond the Alpine frontiers, there were rumblings of vast movements among the northern barbarians, threatening to descend as of old and completely overwhelm the civilization which for over three thousand years had been slowly built up by Orientals and Greeks and Romans in the Mediterranean world. It now looked very much as though the Roman state were about to perish, and with it the civilization which had been growing for so many centuries. Was civilized man indeed to perish from the earth? Or would the Roman state be able to survive and to preserve civilization from destruction?

Rome was a city-state. The finest fruits of civilization in art, literature, science, and thought had been produced under the government of city-states. But among the Greeks this very limited form of state had outlived its usefulness and had over and over again proved its inability to organize and control successfully a larger world, that is, an empire. The city-state

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of the Roman Republic had now also demonstrated that its limited machinery of government was quite unfitted to rule successfully the vast Mediterranean world which it was now endeavoring to control. Would it be able to transform itself into a great imperial state, with all the many offices necessary to give successful government to the peoples and nations surrounding the Mediterranean? Would it then be able to do for the Mediterranean world what the oriental empires had once done for a world equally large in Western Asia and Egypt?

We stand at the point where the civilization of the Hellenistic world began to decline, after the destruction of Carthage and Corinth (146 B.C.). We are now to watch the Roman people in the deadly internal struggle which we have seen impending between rich and poor. They had at the same time to continue their rule of the Mediterranean world as best they could, while the dangerous internal transformation was going on. In the midst of these grave responsibilities they had also to face the barbarian hordes of the north. In spite of all these threatening dangers, we shall see them gaining the needed imperial organization which enabled the Roman state to hurl back the northern barbarians, to hold the northern frontiers for five hundred years, and thus to preserve the civilization which had cost mankind so many centuries of slow progress—the civilization which, because it was so preserved, has become our own inheritance today. This achievement of Rome we are now to follow in the final chapters of the story of the ancient world.

CHAPTER XXVI

A CENTURY OF REVOLUTION AND THE END OF THE REPUBLIC

The Land Situation and the Beginning of the Struggle Between Senate and People

WE MUST now recall the problems noticed at the close of the last chapter, demanding settlement by the Roman Senate. In Italy there was in the first place the perilous condition of the surviving farmers and the need of increasing in some way their numbers and their farms. Equally dangerous was the discontent of the Italian allies, who had never been given the vote or the right to hold office. The problems outside of Italy were not less pressing. They were likewise two in number. There were first the thoroughgoing reform of provincial government and the creation of a system of honest and successful administration of the vast Roman conquests. And second there were the settlement of the frontier boundaries and the repulse of the invading barbarians who were threatening to crush the Mediterranean world and its civilization, as the prehistoric Greeks had crushed Ægean civilization.

The Senate, which was to meet this dangerous situation, had been in practical control of the Roman government since the days of the Samnite War. The senators now formed an oligarchy of selfish aristocrats, as in the Greek cities. Yet there were no laws which had created the undisputed power of the Senate. It was merely by their great prestige and their combined influence as leading men and former magistrates that they maintained their control. The *legal* power of the Roman state really rested in the hands of the Roman people, as they gathered in their assemblies, and this power had never been surrendered to the Senate by any vote or any law.

The crying needs of the farming class in Italy failed to produce any effect upon the blinded and selfish aristocrats of the Senate as a whole. Even before the Hannibalic War the need of newly distributed farm lands was sorely felt. Led by the brave Flaminius, who afterward as consul fell at the head of his army in Hannibal's ambush at Trasimene, the Assembly had passed a law in defiance of the Senate, providing for

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a distribution of public lands which the senators desired for themselves and their friends of the noble class. As a result Flaminius was always hated by the senatorial party, and ever after was regarded as the popular leader who opened the struggle between people and Senate and, having thus shown the people their power, had begun the dangerous policy of allowing the unstable populace to control the government. A tribune named Licinius, who understood the needs of the people, had succeeded in having a law passed by the Assembly which forbade any wealthy citizen to hold over five hundred acres of the public lands or pasturing more than a hundred cattle or five hundred sheep on these lands. Such was the power of the senatorial party, however, that these Licinian laws had become a dead letter.

In gaining control of Italy, Rome had finally annexed about half of the peninsula, and no more land could now be taken without seizing that of the Italian allies. About a decade before the destruction of Carthage and Corinth the last Roman colony had been founded. The only way to secure new farms for assignment to landless farmers was by making the Licinian laws effective, that is, by taking and assigning to farmers the public lands already belonging to the state—what we call “government lands” in the United States. But for generations these lands had been largely held under all sorts of arrangements by wealthy men, and it was sometimes difficult to decide whether a noble’s estate was his legal property or merely public land which he was using. Under such circumstances we can easily imagine with what stubbornness and anger great landholders of the senatorial party would oppose any effort to redistribute the public lands on a basis fair to all.

Flaminius had taught the people their power. Since then they had lacked a skillful leader. The unselfish patriot who undertook to become the leader of the people and to save Italy from destruction by restoring the farmer class was a noble named Tiberius Gracchus. He was a grandson of the elder Scipio, the hero of Zama, and his sister had married the younger Scipio. Elected tribune (133 B.C.), he used to ad-

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dress the people with passionate eloquence and tell them of their wrongs: "The beasts that prowl about Italy have holes and lurking places, where they may make their beds. You who fight and die for Italy enjoy only the blessings of air and light. These alone are your heritage. Homeless, unsettled, you wander to and fro with your wives and children. . . . You fight and die to give wealth and luxury to others. You are called the masters of the world; yet there is no clod of earth that you can call your own."

As tribune, Tiberius Gracchus submitted to the Assembly a law for the reassignment of public lands and the protection and support of the farming class. It was a statesmanlike and moderate law. It called for little, if anything, more than what was already demanded by the Licinian laws. It was an endeavor to do for Italy what Solon had done for Attica, and was decidedly more moderate than the legislation of Solon. After a tragic struggle in which the new tribune resorted to methods not strictly legal, he succeeded in passing his law (132 B.C.). In the effort to secure reëlection, that he might insure the *enforcement* of his law, Gracchus was slain by a mob of senators, who rushed out of the Senate house and attacked the tribune and his supporters. This was the first murderous deed introducing a century of revolution and civil war (133-30 B.C.), which terminated in the destruction of the Roman Republic.

Ten years after the tribunate of Tiberius Gracchus, his younger brother Gaius gained the same office (123 B.C.). He not only took up the struggle on behalf of the landless farmers, but he made it his definite object to attack and weaken the Senate. He endeavored to enlist on the side of the people every possible enemy of the Senate. He therefore organized the capitalists and men of large business affairs, who, of course, were not senators. Because of their wealth they had always furnished their own horses and served in the army as horsemen. They were therefore called knights or, as a group, the equestrian order. Gaius Gracchus secured the support of these men by obtaining for them the right to collect the taxes in Asia, and he gave them great power by founding a court

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made up of knights for the trial of dishonest and extortionate Roman governors appointed by the Senate. At the same time he proposed to give to the Italian allies the long-desired full citizenship—a proposal which angered the people as much as it did the Senate. His efforts finally resulted in a riot in which he was killed, as his brother had been (121 B.C.).

The Rise of One-Man Power: Marius and Sulla

The weakness in the reforms of the Gracchus brothers lay chiefly in their unavoidable reliance upon votes; that is, upon the unstable support of the people at the elections and at the meetings of the popular assembly. It was difficult to hold the interest of the people from election to election. In the Gracchan elections, when work on the farms was pressing, the country people around Rome would not take the time to go up to the city and vote, although they were the very ones to be benefited by the Gracchan laws. The work of Flaminius, and especially of the Gracchi, had taught the people to look up to a leader. This tendency was the beginning of one-man power. But the leader to whom the people now turned was not a magistrate, as the Gracchi had been, but a *military commander*.

The blindness and corruption of the Senate offered the people more than one opportunity for gaining power. The misrule of the Senate abroad was now so scandalous that the people seized this opportunity. In a war between Rome and Jugurtha, ruler of the great kingdom of Numidia in North Africa, the African king, knowing the weakness of the Romans of this age, succeeded in bribing the consul and thus inflicted a crushing defeat on the Roman army. The war then dragged disgracefully on. These events so incensed the people of Rome, that in spite of the fact that the commander subsequently selected by the Senate, an able and honest consul named Metellus, had finally met and defeated Jugurtha, the Assembly appointed Marius, a newly elected consul, to command the army in North Africa in place of Metellus. As the Senate had the right to select the commander by lot, this act signified that the people through the Assembly, had taken

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the matter out of the Senate's hands and thus assumed charge of a great foreign enterprise. What was more important, *the people by this action seized control of the army*, and the Senate was unable to prevent the Assembly's action from going into effect.

Marius, the commander whom the people selected, was himself a man of the people, and he was fortunately also an able soldier. He quickly brought the war with Jugurtha to an end. When the news of his victory reached Rome the people promptly elected him consul for the second time, before his return. In 104 B.C. he returned to Rome, and the people beheld the captive Numidian king led through the streets in chains. Meantime the two powerful tribes of German barbarians, the Cimbrians and the Teutons, combined with Gauls, had been shifting southward and crossing the northern frontiers of Rome. In Gaul and on the Gallic frontiers six Roman armies, one after another, had been disastrously defeated. It looked as though the Roman legions had at last met their match. There was great anxiety in Rome, and the people determined to reëlect Marius consul and send him against the terrible northern barbarians. Meeting the Teutons in southern Gaul, the people's hero not only defeated but practically destroyed the first German host (102 B.C.). Shortly afterward, when the Cimbrians had finally succeeded in crossing the Alps into the Po Valley, Marius met and crushed them also. A soldier of the people had saved Rome.

Marius was not only an able soldier, but he was also a great organizer, and he introduced changes in the Roman army which were epoch-making both in the history of warfare and in the political history of Rome. In order to secure sufficient men for the legions, he abolished the old customs of drafting citizens to serve in the army, and he took in volunteers from among the poor and penniless. Such men soon became professional soldiers. As once in Greece, so now in Rome, the day of the citizen-soldier had passed. The long wars had made many a Roman citizen practically a professional soldier, as we have noticed. The army of Marius was largely a professional army, and although the obligation to serve in the

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army still rested on every Roman citizen, it was less and less rigidly enforced.

The youths who permanently took up the life of the soldier could be so well drilled that they were able to carry out maneuvers impossible for an army made up of citizens serving for a limited time. Marius therefore completely reorganized the legion. He raised its numbers from forty-five hundred to six thousand. He divided each six thousand into ten groups of six hundred each. Such a body of six hundred was called a *cohort*. It formed the unit in the shifting maneuvers which, as we have seen, meant victory or defeat in battle. So perfectly drilled and so fearless were these units, that the cohorts would move about the field with the precision of clockwork and with complete confidence in the plan of the commander, just as the individuals in a perfectly trained football squad respond almost automatically to the signal. The production of the cohort, as we shall see, made it possible to complete the final chapter in the development of the art of warfare in ancient times.

But in spite of his ability as a soldier and as an army organizer, Marius was not a statesman. Having risen from the ranks, he was at heart a rough Roman peasant. He hated the aristocrats of the city; he did not know how to deal with them, nor did he understand the leadership of the popular party which had given him his great military commands. Elected consul for the sixth time in the year 100 B.C., he failed utterly to control the leaders of his party in the political struggles in Rome. They went to such excesses that two of them were slain in a riot. Moderate men were estranged from the cause of the people, and the Senate gained the upper hand again. Marius retired in disgrace, but his leadership had revealed to the people how they might get control over the Senate by combining on a *military* leader, whose power, therefore, did not consist in the peaceful enforcement of the laws and usages of the Roman state, but in the illegal application of military force.

Meantime the struggle between Senate and people was complicated by the increasing discontent of the Italian allies.

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They had contributed as many troops to the conquering armies as had Rome herself, and now they were refused any voice in the control of the conquered territory or any share in the immense wealth which they saw the Romans drawing from it. The wise and liberal policy of the ancient Senate in freely granting citizenship to communities in newly acquired Italian territory had been long abandoned, reminding us of the Athenians in the later years of Pericles. Before the different communities of Italy had had time to merge into a nation, they had been forced into a long series of foreign wars which had made vast conquests. But the possession of these conquests had corrupted and blinded the Senate and the governing community at Rome. By this sudden wealth and power Rome had been raised above all feeling of fellowship with the other communities of Italy. The great peninsula was still filled with disunited communities, and there now rested upon Rome the obligation to make Italy a nation.

There were, happily, some Roman leaders with the insight of statesmen, who perceived this great need and who planned that the Italian allies should receive citizenship. Among them was a wealthy, popular, and unselfish noble named Drusus, who gained election as tribune and began measures leading to the enfranchisement of the Italian allies. But so fierce and savage was the opposition aroused, that this great Roman statesman was assassinated (91 B.C.). The opposition to Drusus and his plans was by no means confined to the Senate. The common people of Rome were likewise jealous of their ancient privileges, and the wealthy men of the new equestrian order were equally unwilling to share their opportunities of plundering the provinces. The Italian allies therefore soon saw the hopelessness of an appeal to Rome for their rights. Immediately after the assassination of Drusus the leading Italian peoples of central and southern Italy revolted and formed a new state and government of their own, with a capital at a central town which they impressively renamed Italica (90 B.C.).

In the war (known as the Social War, 90-88 B.C.) which followed, the army of Rome was at first completely defeated,

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and although this reverse was in a measure retrieved, the strength of the allies could not be broken. Seeing the seriousness of the situation, the Roman politicians tardily took action and granted the desired citizenship. The Italian alliance then broke up, and the Italian communities reentered the Roman state. Yet they entered it as distant wards of the city on the Tiber. The citizens residing in these distant wards could not vote or take any part in the government unless they journeyed to Rome to do so. This situation was of course an absurdity, and again illustrated the inability of an ancient city-state to furnish the machinery of government for a large nation, not to mention a world empire. Nevertheless, Italy was on the way to become a nation unified in government and in speech.

A very threatening war was now breaking out in Asia Minor. Wealthy senators and other Romans of the moneyed class who ruled Rome had many financial interests in this region, and this led them to dread a war there, and to stop it as soon as possible. Among the officers of Marius there had been a very successful soldier named Sulla, who was chosen consul for the year after the war with the allies. The Senate now selected him to command in Asia Minor. But the leaders of the people would not accept the Senate's appointment and, just as in the war against Jugurtha, they passed a law electing Marius to command in the coming war in Asia Minor. Now Marius had no army at the moment, but Sulla was still at the head of the army he had been leading against the Italian allies. He therefore ignored the law passed by the people and marched on Rome with his troops. For the first time a Roman consul took possession of the city by force. The Senate was putting through *its* will with an army, as the Assembly had done before. Sulla forced through a new law by which the Assembly would always be obliged to secure the consent of the Senate before it could vote on any measure. Having thus destroyed the power of the people legally to oppose the will of the Senate, Sulla marched off to his command in Asia Minor.

The Senate had triumphed, but with the departure of Sulla

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and his legions the people refused to submit. There was fighting in the streets, and the senatorial troops fell upon the new Italian citizens as they voted in the Forum, and slew them by hundreds. In the midst of these deeds of violence Marius, who had escaped to Africa, returned at the head of a body of cavalry. He joined the popular leaders and, entering Rome, he began a frightful massacre of the leading men of the senatorial party. The Senate, the first to sow seeds of violence in the murder of Tiberius Gracchus, now reaped a fearful harvest. Marius was elected consul for the seventh time, but he died a few days after his election (86 B.C.). Meantime the people ruled in Rome until the day of reckoning which was sure to come on the return of Sulla.

The war which had called Sulla to Asia Minor was due to the genius of Mithradates, the gifted young king of Pontus. He had prospered by taking advantage of Roman misrule in the East. He had rapidly extended his kingdom to include a large part of Asia Minor, and such was the deep-seated discontent of the Greek cities under Roman rule that he was able to induce the Greek states of Asia Minor and some in Greece to join him in a war against Rome. Even Athens, which had suffered least, supported him. The Romans, busily occupied with civil war at home, were thus suddenly confronted by a foe in the East who seemed as dangerous as Carthage had once been. Sulla besieged Athens, recovered European Greece, and drove the troops of Mithradates back into Asia. Thereupon crossing to Asia Minor, he finally concluded a peace with Mithradates. He laid an enormous indemnity of twenty thousand talents on the Greek cities of Asia Minor. Then leaving them to the tender mercies of the Roman money-lenders and to the barbarous raids of the eastern pirates, Sulla returned to Rome.

On the way thither the Roman army of Sulla defeated the Roman armies of the people, one after another. Finally, outside the gates of the city, Sulla overthrew the last army of the people and entered Rome as master of the state, without any legal power to exercise such mastery. By means of his army, however, he forced his own appointment as Dictator, with

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far greater powers than any Dictator had ever before possessed (82 B.C.). His first action was to begin the systematic slaughter of the leaders of the people's party and the confiscation of their property. Rome passed through another reign of terror like that which followed Marius's return. The hatreds and the many debts of revenge which Sulla's barbarities left behind were later a frequent source of disturbance and danger to the state.

Then Sulla forced the passage of a whole series of new laws which deprived the Assembly of the people and the tribunes of their power and gave the supreme leadership of the state to the Senate, the body which had already so disastrously failed to guide Rome wisely since the great conquests. Some lesser reforms of value Sulla did introduce, but a policy based on the supremacy of the Senate was doomed to failure. To Sulla's great credit he made no attempt to gain permanent control of the state, but on the completion of his legislation he retired to private life (79 B.C.).

The Overthrow of the Republic: Pompey and Cæsar

Following the death of Sulla a year after his retirement, agitation for the repeal of his hateful laws, which bound the people and the tribunes hand and foot, at once began. To accomplish this the people had now learned that they must make use of a military leader. The Senate had been ruling nine years in accordance with Sulla's laws when the popular leaders found the military commander whom they needed. He was a former officer of Sulla, named Pompey, who had recently won distinction in Spain, where he had been sent by the Senate to overthrow a still unsubdued supporter of Marius. He was elected consul (70 B.C.), chiefly because he agreed to repeal the obnoxious laws of Sulla, and he did not fail to carry out his promise. This service to the people now secured to Pompey a military command of supreme importance.

Such was the neglect of the Senate to protect shipping that the pirates of the East, chiefly from Cilicia, had overrun the whole Mediterranean. They even appeared at the mouth of

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the Tiber, robbing and burning. They kidnaped Roman officials on the Appian Way, but a few miles from Rome, and they finally captured the grain supplies coming into Rome from Egypt and Africa. In 67 B.C. the Assembly of the people passed a law giving Pompey supreme command in the Mediterranean and for fifty miles back from its shores. He was assigned two hundred ships and allowed to make his army as large as he thought necessary. No Roman commander had ever before held such far-reaching and unrepudican power.

In forty days Pompey cleared the Western Mediterranean of pirates. He then sailed eastward, and in seven weeks after his arrival in the Ægean he had exterminated the Cilician sea robbers likewise and burned their docks and strongholds. The next year his command was enlarged to include also the leadership in a new war against Mithradates which had been going on with satisfactory results under Lucullus, a Roman commander of the greatest ability. Lucullus had already broken the power of Mithradates and also of the vast kingdom of Armenia, under its king, Tigranes. Pompey therefore had little difficulty in subduing Mithradates, and had only to accept the voluntary submission of Tigranes. He crushed the remnant of the kingdom of the Seleucids and made Syria a Roman province. He entered Jerusalem and brought the home of the Jews under Roman control. Before he turned back, the legions under his leadership had marched along the Euphrates and had looked down upon the Caspian. There had been no such conquests (67-62 B.C.) in the Orient since the Macedonian campaigns, and to the popular imagination Pompey seemed another Alexander marching in triumph through the East.

Meantime a new popular hero had arisen at Rome. He was a nephew of Marius, named Julius Cæsar, born in the year 100 B.C., and thirty years old in Pompey's consulate. He had supported all the legislation against the laws of Sulla and in favor of Pompey's appointment to his great command. He took up the cause of Marius and exalted his memory in public speeches so that he quickly gained a foremost place among the leaders of the people. The hatreds aroused by Sulla's

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executions and confiscations had left a great number of revengeful and dissatisfied men, who to no small extent made up the following of Cæsar. Among Cæsar's political friends was a noble named Catiline. He was the leader of a good many undesirable followers, but Cæsar was supporting him and another friend for election to the consulship.

Popular distrust of Cæsar's purposes, and Catiline's evil reputation, led to the defeat of Catiline and to the election of Cicero, a comparatively new man, but the ablest orator and the most gifted literary man of the age. By the formation of a new middle-class party from the Italian communities, which should stand between the Senate and the people, Cicero dreamed of a restoration of the old Republic as it had once been. Catiline, meantime, burdened with debts and rendered desperate by the loss of the election, gathered about him all the dissatisfied bankrupts, landless peasants, Sullan veterans, outlaws, and slaves—the debased and lawless elements of Italy seeking an opportunity to rid themselves of debt or to better their situation. Foiled by Cicero in an attempt to seize violent control of the government, the reckless Catiline died fighting at the head of his motley following. Cicero's overthrow of Catiline brought him great power and influence and made his consulship (63 B.C.) one of brilliant success. Cæsar, on the other hand, was suspected, and perhaps justly, of connection with the uprising of Catiline. This suspicion proved to be a serious setback in his political career.

Just at this juncture Pompey returned to Italy clothed in splendor as the great conqueror of the Orient. He made no attempt to influence the political situation by means of his army, the command of which he relinquished; but he needed political influence to secure the Senate's formal approval of his arrangements in Asia Minor, and a grant of land for his troops. For two years the Senate refused Pompey these concessions. Meantime Cæsar stepped forward in Pompey's support, and the two secured for their plans the aid of a very wealthy Roman noble named Crassus. The plan was that Cæsar should run for the consulship and, if successful, secure the two things which we have seen Pompey needed. This

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private alliance of these three powerful men (called a "triumvirate") gave them the control of the situation. As a result Cæsar was elected consul for the year 59 B.C.

The consulship was but a step in Cæsar's plans. Having secured for Pompey the measures which he desired, Cæsar fearlessly put through new land laws for the benefit of the people, and then provided for his own future career. It was clear to him that he must have an important military command in order to gain an army. He saw a great opportunity in the West, like that which had been given Pompey in the Orient. Rome still held no more than a comparatively narrow strip of land along the coast of what is now southern France. On its north was a vast country occupied by the Gauls, and this region of Gaul was now sought by Cæsar. He had no difficulty in securing the passage of a law which made him for five years governor of Illyria and of Gaul on both sides of the Alps, that is, the valley of the Po in northern Italy, which we remember had been occupied by the Gauls, and also further Gaul beyond the Alps, as just described.

Cæsar took charge of his new province early in 58 B.C., and at once showed himself a military commander of surpassing skill. Not only did he possess the keenest insight into the tactical maneuvers which win victory on the field of battle itself, but he also understood at a glance the resources and abilities of a people and their armies. He knew that the greatest problem facing a commander was to keep his army in supplies and to guard against moving it to a point where it was impossible either to carry with it the supplies for feeding it or to find them on the spot. So efficient was his own great organization that he knew he could carry such supplies more successfully than could the barbarian Gauls. He perceived that no great barbarian host could be kept long together in one place, because they did not possess the organization for carrying with them, or securing later, enough food to maintain them for any length of time. When the necessity of finding provisions had forced them to separate into smaller armies, then Cæsar swiftly advanced and defeated these smaller divisions.

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By this general plan of operations, in eight years of march and battle he subdued the Gauls (58-50 B.C.) and conquered their territory from the ocean and the English Channel eastward to the Rhine. He drove out a dangerous invasion of Gaul by the Germans and, astonishing them by the skill and speed with which he built a bridge over the Rhine, he invaded their country and established the frontier of the new Gallic province at the Rhine. He even crossed the Channel and carried an invasion of Britain as far as the Thames. He added a vast dominion to the Roman Empire, comprising in general the territory of modern France and Belgium. We should not forget that his conquest brought into France the Latin language, from which French speech has descended.

Cæsar had shown himself at Rome a successful politician. In Gaul he proved his ability as a brilliant soldier. Was he also a great statesman, or was he, like Pompey, merely to seek a succession of military commands and to accomplish nothing to deliver Rome from being a cat's-paw of one military commander after another? Cæsar's understanding of the situation at Rome was perfectly clear and had been so from the beginning. He was convinced that the foreign wars and the rule of the provinces had introduced into Roman government the ever-returning opportunity for a man of ability to gain military power which could not be controlled by the state. It was of no use to bring in a new political party, as Cicero hoped to do, and to pit mere *votes* against the flashing swords of the legions; for the old machinery of government furnished by the Republic possessed no means of preventing the rise of one ambitious general after another to fight for control of the state as Marius and Sulla had done. The Republic could therefore never again restore order and stable government for Italy and the empire. Herein Cæsar showed his superiority as a statesman over both Sulla and Cicero.

The situation therefore demanded an able and patriotic commander with an army behind him who should make himself the undisputed and permanent master of the Roman government and subdue all other competitors. Consistently and steadily Cæsar pursued this aim, and it is no reflection

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upon him to say that it satisfied his ambition to do so. One of his cleverest moves was the publication of the story of his Gallic campaigns, which he found time to write even in the midst of dangerous marches and critical battles. The tale is narrated with the most unpretentious simplicity. Although it is one of the greatest works of Latin prose, the book was really a political pamphlet, intended to convey to the Roman people an indelible impression of the vast conquests and other services which they owed to their governor in Gaul. It did not fail of its purpose. At present it is the best-known Latin reading book for beginners in that language.

When Cæsar's second term as governor of Gaul drew near its end, his supporters in Rome, instructed by him, were arranging for his second election to the consulship. The Senate was dreading his return to Italy and was putting forth every effort to prevent his reëlection as consul. The experience in the time of Marius had taught the Senate what to fear when a victorious commander returned to Rome to avenge their opposition to the people. They must have a military leader like Sulla again. Meantime Crassus, the wealthy member of the triumvirate, had been slain in a disastrous war against the Parthians, beyond the Euphrates, and the group had broken up, thus freeing Pompey. In the midst of great confusion and political conflict in Rome, the leading senators now made offers to Pompey, in spite of the fact that he had received his great command from the Assembly of the people and had been a leader of the popular party. He was no statesman and had no plans for the future of the state. He was simply seeking control of an army. The result was that he undertook to defend the cause of the Senate and support the enemies of the people. What should have been a lawful political contest again became a military struggle between two commanding generals, Cæsar and Pompey, like that of Marius and Sulla a generation earlier.

Cæsar endeavored to compromise with the Senate, but on receiving as their reply a summons to disband his army, he had no hesitation as to his future action. The professional soldiers who now made up a Roman army had no interest in political

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questions, felt no responsibility as citizens, and were conscious of very little obligation or attachment to the state. On the other hand, they were usually greatly attached to their commanding general. The veterans of Cæsar's Gallic campaigns were unswervingly devoted to him. When he gave the word, therefore, his troops followed him on the march to Rome without a moment's hesitation, to draw their swords against their fellow Romans forming the army of the Senate under Pompey. Cæsar and his troops at once crossed the Rubicon, the little stream which formed the boundary of his province toward Rome. Beyond this boundary Cæsar had no legal right to lead his forces, and in crossing it he had taken a step which became so memorable that we still proverbially speak of any great decision as a "crossing of the Rubicon."

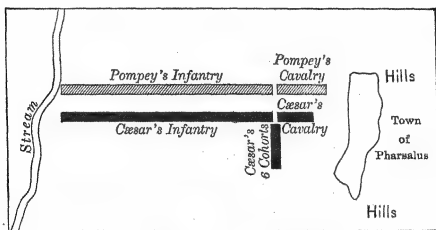
The swiftness of Cæsar's lightning blows was always one of the greatest reasons for his success. Before the Senate's message had been an hour in his hands, Cæsar's legions were on the march from the Po Valley toward Rome (49 B.C.). Totally unprepared for so swift a response on Cæsar's part, the Senate turned to Pompey, who informed them that the forces at his command could not hold Rome against Cæsar. Indeed, there was at the moment no army in the empire capable of meeting Cæsar's veteran legions with any hope of victory. Pompey retreated, and as Cæsar approached Rome the majority of the senators and a large number of nobles fled with Pompey and his army. By skillful maneuvers Cæsar forced Pompey and his followers to forsake Italy and cross over to Greece. Cæsar's possession of Rome made it possible for him to be elected consul, and then to assume the rôle of lawful defender of Rome against the Senate and the army of Pompey.

His position, however, was not yet secure. Pompey, in the eyes of the Orient, was the greatest man in Rome. He could muster all the peoples and kingdoms of the East against Cæsar. Furthermore, he now held the great fleet with which he had suppressed the pirates, and he was thus master of the sea. With all the East at his back, he was improving every moment to gather and discipline an army with which to crush Cæsar. Furthermore, Pompey's officers still held Spain since his re-

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covery of it from the followers of Marius. Cæsar was therefore obliged to reckon with the followers of Pompey on both sides, east and west. He determined to deal with the west first. With his customary swiftness he was in Spain by June (49 B.C.). Here he met the army of Pompey's commanders with maneuvers of such surprising cleverness that in a few weeks he cut off their supplies, surrounded them, and forced them to surrender without fighting a battle.

Having heard of Cæsar's departure into Spain, Pompey and his great group of senators and nobles had been preparing at



PLAN OF THE BATTLE OF PHARSALUS

their leisure to cross over and take possession of Italy. Before they could even begin the crossing, Cæsar had returned from Spain victorious, and to their amazement, in spite of the fact that they controlled the sea, he embarked at Brundisium, evaded their warships, and landed his army on the coast of Epirus. Forced by lack of supplies to divide his army, he left a part of his troops so exposed that they suffered a dangerous reverse. In the end, however, in spite of his inferior numbers, he accepted battle with Pompey at Pharsalus in Thessaly (48 B.C.).

Pompey's plan for the battle was skillfully made, but it was not clever enough to outwit the greatest commander of the age. It consisted in drawing up his line so that a small stream would protect his right wing, in order that he might throw

all his cavalry to the left wing. Probably twice as strong as Cæsar's right wing which it faced, it was expected to cut its way victoriously through, and then, passing around Cæsar's right end, to attack his legions in the rear. As the two armies approached each other, Cæsar perceived Pompey's plan of battle. He at once shifted six of his best cohorts, over three thousand men, to his right end, where they were screened by his own cavalry from discovery by the enemy. Cæsar then ordered his cavalry, mostly Gauls and Germans, to retreat as Pompey's horsemen attacked them. As they retreated, Pompey's unsuspecting cavalry followed and pushed forward into Cæsar's cleverly devised trap. For when Cæsar's six cohorts swiftly dropped in behind them, Pompey's horsemen were caught between the six cohorts behind and Cæsar's cavalry in front, and they were quickly cut to pieces. Cæsar's cavalry then swept swiftly around the enemy's now undefended left end and attacked Pompey's legions in the rear. As Cæsar threw in his reserves against the hostile center at the same moment, the whole senatorial army was driven off the field in flight. Its remnants surrendered the next morning.

This battle represented the highest development of military art in the ancient world, and it never passed beyond the masterful skill of the victor of Pharsalus. Pompey, crushed by the first defeat of his life, escaped into Egypt, where he was basely murdered. Cæsar, following Pompey to Egypt, found ruling there the fascinating Cleopatra, the seventh of the name and the last of the Ptolemies. The charms of this remarkable queen and the political advantages of her friendship met a ready response on the part of the great Roman. Here Cæsar displayed probably the most serious weakness in his career, as he tarried in Alexandria, dallying with this charming and gifted woman from October, 48, to the spring of 47 B.C. We know little of the operations and battles by which Cæsar overthrew his opponents in Asia Minor. It was from there that he sent his famous report to the Senate: "I came, I saw, I conquered" (*veni, vidi, vici*). He was equally triumphant in the African province behind Carthage, and finally also in Spain. These, the only obstacles to Cæsar's complete

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control of the empire of the Western world, were all disposed of by March, 45 B.C., a little over four years after he had first taken possession of Italy with his army.

Cæsar used his power with great moderation and humanity. From the first he had taken great pains to show that his methods were not those of the bloody Sulla. He gratified no personal revenge, and he preserved the life of the gifted Cicero in spite of his hostility. Cæsar never issued any proclamation indicating the form of state which he planned to set up at Rome for the government of the vast Mediterranean world which he had conquered. Nevertheless, the measures which he took, especially his treatment of the Senate, left little doubt in the minds of the senatorial oligarchy that Cæsar intended his own position to be that of a Hellenistic sovereign like Alexander the Great. Nevertheless, he was too wise a statesman to abolish at once the outward forms of the Republic. He possessed all the real power, and the Republic was doomed, for there was no one in Rome to gainsay this mightiest of the Romans. He had himself made Dictator for life, and assumed also the powers of the other leading offices of the state.

Cæsar lived only five years (49-44 B.C.) after his first conquest of Italy (49 B.C.). Of this period, as we have seen, four years were almost wholly occupied by campaigns. He was therefore left but little time for the colossal task of reshaping the Roman state and organizing the vast Roman Empire, the task in which the Roman Senate had so completely failed. Sulla had raised the membership of the Senate from three to six hundred. Cæsar did not abolish the ancient body, but he greatly increased its numbers, filled it with his own friends and adherents, and even installed former slaves and foreigners among its members. He thus destroyed the public respect for it, and it was entirely ready to do his bidding. The new Senate could not obstruct him, and hence the whole projected administration of the provinces centered in him and was permanently responsible to him. The election of the officials of the Republic went on as before, but he began far-reaching reforms of the corrupt Roman administration. In all this he

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was launching the Roman Empire. He was in fact its first emperor, and only his untimely death continued the death struggles of the Republic for fifteen years more.

He sketched vast plans for the rebuilding of Rome, for magnificent public buildings, and for the alteration of the plan of the city, including even a change in the course of the Tiber. He laid out great roads along the important lines of communication, and he planned to cut a sea canal through the Isthmus of Corinth. He completely reformed the government



FIG. 160. COIN ISSUED BY BRUTUS AFTER THE ASSASSINATION OF JULIUS CAESAR

On one side the coin bears the head of Brutus, accompanied by his name and the title "Imperator" (abbreviated to IMP). On the other side are two daggers, intended to recall the assassination of Cæsar, and between them appears the cap of liberty, to suggest the liberty which the Romans supposedly gained by his murder. In order that the meaning of all this might be perfectly clear, there appears, below, the inscription EID MAR, which means the Ides of March (the Roman term for the fifteenth of March), the date of Cæsar's murder

of cities. He put an end to centuries of inconvenience with the Greco-Roman moon-calendar by introducing into Europe the practical Egyptian calendar, which we are still using, though with inconvenient Roman alterations. The imperial sweep of his plans included far-reaching conquests into new lands, like the subjugation of the Germans. Had he carried out these plans, the Roman Empire would have included a large part of the Northern Flatlands, instead of merely their west end, and the language of the Germans today would be a descendant of Latin, like the speech of the French and the Spanish.

The eighteenth of March, 44 B.C., was set as the date for Cæsar's departure for the Orient on a great campaign against

THE TRIUMPH OF AUGUSTUS

the Parthians east of the Euphrates. But there were still men in Rome who were not ready to submit to the rule of one man. On the fifteenth of March, three days before the date arranged for his departure, and only a year after he had quelled the last disturbance in Spain, these men struck down the greatest of the Romans. If some of the murderers of this just and powerful statesman, who was for the first time giving the unhappy peoples of the Mediterranean world a government alike, just, honest, and efficient—if some of his murderers, like Brutus and Cassius, fancied themselves patriots overthrowing a tyrant, they little understood how vain were all such efforts to restore the ancient Republic. World dominion and its military power had forever demolished the Roman Republic, and the murder of Cæsar again plunged Italy and the empire into civil war. The death of Alexander the Great interrupted in mid-career the conquest of a world empire stretching from the frontiers of India to the Atlantic Ocean. The bloody deed of the Ides of March, 44 B.C., stopped a similar conquest by Julius Cæsar—a conquest which would have subjected Orient and Occident to the rule of a single sovereign. A like opportunity never rose again, and Cæsar's successor had no such aims.

The Triumph of Augustus and the End of the Civil War

Over in Illyria the terrible news from Rome found the murdered statesman's grand-nephew Octavian, a youth of eighteen, quietly pursuing his studies. A letter from his mother, brought by a secret messenger, bade him flee far away eastward without delay, in order to escape all danger at the hands of his uncle's murderers. The youth's reply was to proceed without a moment's hesitation to Rome. This statesmanlike decision of character reveals the quality of the young man as he showed it both then and for years to follow.

On his arrival in Italy Octavian learned that he had been legally adopted by Cæsar and also made his sole heir. His bold claim to his legal rights was met with refusal by Mark Antony, Cæsar's fellow consul and one of his closest friends and supporters, who had taken possession of Cæsar's fortune

and as consul could not be easily forced. By such men Octavian was treated with patronizing indulgence at first—a fact to which he owed his life. He was too young to be regarded as dangerous. But his young shoulders carried a very old head. He slowly gathered the threads of the tangled situation in his clever fingers, not forgetting the lessons of his adoptive father's career. The most obvious lesson was the necessity of military power. He therefore rallied a force of Cæsar's veterans, and two legions of Antony's troops also came over to him. Then playing the game of politics, with military power at his back and none too scrupulous a conscience, he showed himself a statesman no longer to be ignored.

By skillful manipulation of the situation at Rome, Octavian forced his own election as consul when only twenty years of age (43 B.C.). He was then able to form an alliance composed of himself and the other two most powerful leaders, Antony (Cæsar's old follower) and Lepidus. This second triumvirate was officially recognized by vote of the people. To obtain the money for carrying on their wars and establishing themselves, the three began at once a Sullan reign of terror, with confiscation of property and murder of their enemies. Among them the great orator Cicero, who had endeavored to preserve the old Republic, was slain by Antony's brutal soldiers. He was the last of the orator-statesmen of Rome, as had been Demosthenes of Athens. But the Republic was still supported by the two leading murderers of Cæsar, Brutus and Cassius. They were at the head of a powerful eastern army, like that of Pompey, and were encamped as Philippi in Macedonia. As soon as they could leave Rome, Octavian and Antony moved against Brutus and Cassius, and in a great battle at Philippi the last defenders of the Republic were completely defeated (42 B.C.).

The two victors then divided their domains: Octavian was to return to Italy and endeavor to crush the enemies of the triumvirate in the West; Antony was to remain in the East and bring it again under full subjection to Rome. In the West a rebellious son of Pompey, who seized Sicily and held control of the sea with his fleet, was finally crushed by Octavian; and

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soon after Lepidus, who had been given the province of Africa behind Carthage, was also overthrown. Within ten years after Cæsar's assassination Octavian, although only twenty-eight, had gained complete control of Italy and the West.

Antony, meantime, had shown that he had no ability as a serious statesman. His prestige was also greatly dimmed by a disastrous campaign against the Parthians. Dazzled by the attractions of Cleopatra, he was now living in Alexandria and Antioch, where he ruled the East as far as the Euphrates like an oriental sovereign. With Cleopatra as his queen, he maintained a court of sumptuous splendor like that of the Persian kings in the days of their empire. Cleopatra, who had once hoped to rule Rome as Cæsar's queen, was now cherishing similar hopes as the favorite of Antony. The tales of all this made their way to Rome and did not help Antony's cause in the eyes of the Roman Senate. Octavian easily induced the Senate for this and other reasons to declare war on Cleopatra, and thus he was able to advance against Antony. As the legions of Cæsar and Pompey, representing the East and the West, had once before faced each other on a battlefield in Greece, so now Octavian and Antony, the leaders of the East and the West, met at Actium (31 B.C.) on the west coast of Greece. A naval battle was fought, with the land forces as spectators. Before the end of the battle the soldiers of Antony saw their leader and his oriental queen forsaking them in flight, as Cleopatra's gorgeous galley, followed by her splendid royal flotilla, swept out to sea carrying the cowardly Antony to Egypt. The outcome was a sweeping victory for the heir of Cæsar.

The next year Octavian landed in Egypt without resistance worth mentioning and took possession of the ancient land. Antony, probably forsaken by Cleopatra, took his own life. The proud queen was unwilling to undergo the crushing humiliation of gracing Octavian's triumph at Rome, two of whose rulers had yielded to the power of her beauty and her personality, and she too died by her own hand. She was the last of the Ptolemies, the rulers of Egypt for nearly three hundred years, since Alexander the Great. Octavian therefore

A CENTURY OF REVOLUTION

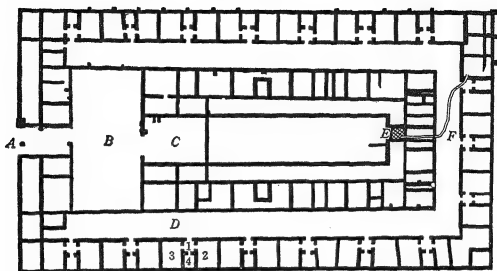
made Egypt Roman territory. To the West, which he already controlled, Octavian had now added also the East. The lands under his control girdled the Mediterranean, and the entire Mediterranean world was under the power of a single ruler. Thus at last the unity of the Roman dominions was restored and an entire century of revolution and civil war, which had begun in the days of the Gracchi (133 B.C.), was ended (30 B.C.).

Octavian's success marked the final triumph of one-man power in the entire ancient world, as it had long ago triumphed in the Orient. The century of strife which Octavian's victory ended, was now followed by two centuries of profound peace, broken by only one serious interruption. These were the first two centuries of the Roman Empire, beginning in 30 B.C.¹ We shall now take up the two centuries of peace in the two following chapters.

¹ It should be noticed that these two centuries of peace began thirty years before the first year of the Christian Era, and hence do not correspond exactly with the first two centuries of this era.

PART V

THE ROMAN EMPIRE



THE ROMAN MILITARY HOSPITAL AT NOVAESIUM (NEAR NEUSS, IN THE PRUSSIAN RHINE PROVINCE), ABOUT A.D. 100

While the scientific progress made in medicine after the sixth century B.C. was of Greek origin, yet it was during the Roman Empire that the Greek and Greek-trained physicians made certain improvements in the *practice* of medicine. These improvements were principally in organization, in development of surgical implements, and in sanitation. The greatest physician of Roman times was the Greek Galen, from Asia Minor. It seems evident from his books that the ideas of sanitation which Rome developed made the doctors of the Roman Empire perhaps the cleanest group of doctors in antiquity. The ground plans of the hospital excavated at Novaesium well illustrate the above three points in the progress of medicine in the Roman Empire. The Empire was very particular about the health of the soldiers. Indeed, the doctors of such a well-regulated Roman military hospital as that at Novaesium, around the end of the first century A.D., would have been shocked at the horrors which Florence Nightingale found at the Scutari barrack hospital in the Crimean War in A.D. 1854. The hospital at Novaesium was about 165 feet wide by 295 feet long. The arrangement, as may be seen from the diagram above, was very similar to the corridor system in modern hospitals. The entrance corridor, beginning at A, led into the court B, which probably held a reservoir for rain water. Room C was perhaps the dining-hall. There are some seventeen suites distributed along the main corridor, like the one at D. Apparently one entered the anteroom 1, opening off the corridor, and could immediately shut the door to keep drafts and noise from the sickrooms 2 and 3. In the small room 4 the attendant probably sat, and clothes and supplies could also be stored there. The room E was apparently for the disposal of waste, as it contains a brick tile covering under which begins the channel F, which seems to have continued on to the outside of the building. Many surgical implements were found scattered throughout the ruins of the building. (After Meyer-Steinig)

CHAPTER XXVII

THE FIRST OF TWO CENTURIES OF PEACE: THE AGE OF AUGUSTUS AND THE SUCCESSORS OF HIS LINE

The Rule of Augustus and the Beginning of Two Centuries of Peace

WHEN Octavian returned to Italy he was received with the greatest enthusiasm. A veritable hymn of thanksgiving arose among all classes at the termination of a century of revolution, civil war, and devastation. The great majority of Romans now felt that an individual ruler was necessary for the control of the vast Roman dominions. Octavian therefore entered upon forty-four years of peaceful and devoted effort to give to the Roman Empire the organization and government which it had so long lacked. His most difficult task was to alter the old form of government so as to make a legal place for the power he had taken by military force. Unlike Cæsar, Octavian felt a sincere respect for the institutions of the Roman Republic and did not wish to destroy them nor to gain for himself the throne of an oriental sovereign. During his struggle for the mastery heretofore, he had preserved the forms of the Republic and had been duly elected to his great position.

Accordingly, on returning to Rome, Octavian did not disturb the Senate, but did much to strengthen it and improve its membership. Indeed, he voluntarily handed over his powers to the Senate and the Roman people in January, 27 B.C. The Senate thereupon, realizing by past experience its own helplessness, and knowing that it did not possess the organization for ruling the great Roman world successfully, gave him officially the command of the army and the control of the most important frontier provinces. Besides these vast powers, he held also the important rights of a tribune, and it was on this last office that he chiefly based his legal claim to his power in the state.

At the same time the Senate conferred upon him the title of "Augustus," that is, "the august." The chief name of his office was "Princeps," that is, "the first," meaning the first of

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the citizens. Another title given the head of the Roman Empire was an old word for director or commander, namely, *Imperator*, from which our word "emperor" is derived. Augustus, as we may now call him, regarded his position as that of an official of the Roman Republic appointed by the Senate. Indeed, his appointment was not permanent but for a term of years, after which he was reappointed.

The Roman Empire, which here emerges, was thus under a dual government of the Senate and of the Princes, whom we commonly call the emperor. The clever Augustus had done what his illustrious foster father, Julius Cæsar, had thought unnecessary: he had conciliated those Romans who still cherished the old Republic. The new arrangement was officially a restoration of the Republic. But this dual state in which Augustus endeavored to preserve the old Republic was not well balanced. The Princes held too much power to remain a mere appointive official. His powers were more than once increased by the Senate during the life of Augustus—not on his demand, for he always showed the Senate the most ceremonious respect, but because the Senate could not dispense with his assistance. At the same time the old powers of the Senate could not be maintained reign after reign, when the Senate controlled no army.

The Princes was the real ruler, because the legions were behind him, and the so-called republican state created by Augustus tended to become a military monarchy, as we shall see. All the influences from the Orient were in the same direction. Egypt was in no way controlled by the Senate, but remained a private domain of the emperor. In this, the oldest state on the Mediterranean, the emperor was king, in the oriental sense. He collected its huge revenues and ruled there as the Pharaohs and Ptolemies had done. His position as absolute monarch in Egypt influenced his position as emperor and his methods of government everywhere. Indeed, the East as a whole could only understand the position of Augustus as that of a king, and this title they at once applied to him. This also had its influence in Rome.

The Empire which Rome now ruled consisted of the entire

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Mediterranean world, or a fringe of states extending entirely around the Mediterranean and including all its shores. But the frontier boundaries, left almost entirely unsettled by the Republic, were a pressing question. There was a natural boundary in the south, the Sahara, and also in the west, the Atlantic; but on the north and east further conquests might be made. In the main Augustus adopted the policy of organizing and consolidating the Empire *as he found it*, without making further conquests. In the east his boundary thus became the Euphrates, and in the north the Danube and the Rhine. The angle made by the Rhine and the Danube was not favorable for defense of the border, and late in his reign Augustus seems to have made an effort to push forward to the Elbe. This would have given the Empire a more nearly straight boundary, extending from the Black Sea to Denmark in a general line from the southeast to the northwest. Whatever the intentions of Augustus may have been, the Roman army was terribly defeated by the barbarous German tribes, and the effort was abandoned. The northern boundary of the Empire was then made a line of provinces west of the Rhine and south of the Danube, extending from the North Sea to the Black Sea.¹

An examination of the strategic situation of the Roman Empire within the Great Northwest Quadrant discloses serious dangers. The Highland Zone as a whole, except the extreme east end of it, next to the Caspian Sea, was included within the boundaries of the Roman Empire. The Highland Zone might therefore be regarded as the northern bulwark of the Empire. Cæsar's conquests, however, had absorbed the west end of the Northern Flatlands. East of the Rhine lay the still unconquered middle and east end of the Northern Flatlands, with a barbarian population little influenced by the civilization of the Mediterranean world. This large body of still unassimilated barbarian peoples was a continuous danger; for the mountains of the Highland Zone were not an im-

¹ Recent study of this question is leading some historians also to the view that Augustus never really intended or attempted to conquer to the Elbe.

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penetrable barrier, and the water way from the *Ægean* to the Black Sea cut entirely through it, offering an easy route from the Northern Flatlands to the Mediterranean. On the east the eastern two-thirds of the Fertile Crescent and beyond it the eastern end of the Highland Zone had not been conquered by Rome. From these regions powerful peoples possessed of much civilization threatened the eastern end of the Roman Empire and eventually conquered it. The Roman Empire, therefore, with its fringe of territory around the Mediterranean, included only a portion of the Great Northwest Quadrant which was enfolded on north and east by unassimilated populations. The later history of Europe and of civilization has been in no small degree affected by this fact; for, as we observe the present condition of Russia, Persia and Mesopotamia, we realize that civilization has not even yet wholly assimilated these regions of the Great Northwest Quadrant which lay outside the frontiers of the Roman Empire. The vast responsibility which confronted Augustus, though he probably did not clearly realize it, was so to organize the civilized Mediterranean world as to enable it to survive not only internal dissension and decay, but also barbarian assaults from without.

For the defense of the vast frontiers it was necessary to maintain a large standing army. Nevertheless the army, now carefully reorganized by Augustus, was not as large as the armies which had grown up in the civil wars. Augustus first reduced it to eighteen legions, but later raised it to twenty-five. It probably contained, on the average, about two hundred and twenty-five thousand men. The army was now recruited chiefly from the provinces, and the foreign soldier who entered the ranks received citizenship in return for his service. Thus the fiction that the army was made up of citizens was maintained. But the tramp of the legions was heard no more in Italy. Henceforth they were posted far out on the frontiers, and the citizens at home saw nothing of the troops who defended them.

At the accession of Augustus the Roman Empire from Rome outward to the very frontiers of the provinces was sadly in

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need of restoration and opportunity to recuperate. The cost of the civil wars had been borne by the provinces. The eastern dominions, especially Greece, where the most important fighting of the long civil war had occurred, had suffered severely. For a century and a half before the great battles of the civil war, the provinces had been oppressed—excessively overtaxed or tacitly plundered. Barbarian invaders had seized the undefended cities of Greece and even established robber states for plundering purposes. Greece herself never recovered from the wounds then suffered, and, in general, the Eastern Mediterranean had been greatly demoralized. The civilized world was longing for peace.

Augustus therefore now undertook to do for the Mediterranean world what five hundred years earlier Darius had done for the Persian Empire, when it was even larger than the Roman Empire. But the task of Augustus demanded the organization of a much more highly civilized world than that of the Persian Empire, including a vast network of commerce in the Mediterranean such as no earlier age had ever seen. Great peoples and nations had to be officially taken into the Empire and given honest and efficient government. Some of them had old and successful systems of government; others had no government at all. Egypt, for example, had long before possessed the most highly organized administration in the ancient world; but regions of the West, like Gaul, had not yet been given a system of government. All this Augustus endeavored to do.

Under the Republic the governor of a province not only served for a short term but was also without experience. His unlimited power, like that of an absolute monarch, made it impossible for the consuls changing every year at home to control him. The governor of a province was now appointed by the permanent ruler at Rome, and such a governor knew that he was responsible to that ruler for wise and honest government of his province. He also knew that if he proved successful he could hold his post for years, or be promoted to a better one. There thus grew up under the permanent control of Augustus and his successors a body of provincial governors of experience and efficiency. The small group of

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less important provinces still under the control of the Senate, although they continued to suffer to some extent under the old system, also felt the influence of the improved methods.

In the days of the Republic no one had ever tried to settle how much money was needed to carry on the government, and how much of this sum each province ought justly to pay in the form of taxes. Augustus proceeded to put together huge census lists and property assessments, by which to determine the population and the total value of the property in each province. When this great piece of work was done he could determine just how much taxes each province should justly pay. He decreed that the inhabitants of the provinces were to pay two kinds of direct taxes, one on land and one on personal property, besides customs duties and various internal revenue taxes. Augustus had complete control of the vast sums which he thus received in taxes, and his use of them was wise and just. Much of this money went back to the provinces to pay for necessary public works, such as roads, bridges, aqueducts, and public buildings. In making all these financial arrangements Augustus learned much from Egypt.

Thus at last two centuries of Roman mismanagement of the provinces ended, and the obligation of Rome to give good government to her dependencies was finally fulfilled. The establishment of just, stable, and efficient control by the government at once produced a profound change, visible in many ways, as we shall see, but especially in business. Men of capital no longer kept their money timidly out of sight, but put it at once into business ventures. The rate of interest under the last years of the Republic had been twelve per cent. But as money now became more plentiful, the interest rate quickly sank to four per cent.

The great Mediterranean world under the control of Rome entered upon a new age of prosperity and development, unknown before when the nations along its shores were still fighting each other in war after war. A process of unification began which was to make the Mediterranean *world* a Mediterranean *nation*. The national threads of our historical narra-

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tive have heretofore been numerous, as we have followed the stories of the oriental nations, of Athens, Sparta, Macedonia, Rome, Carthage, and others. For a long time we have followed these narratives separately like individual strands; but now they are to be twisted together into a single thread of national history, that of the Roman Empire. The great exceptions are the German barbarians in the north, and the unconquered Orient east of the Euphrates.

The Civilization of the Augustan Age

In the new Mediterranean nation thus growing up, it was the purpose of Augustus that Italy should occupy a superior position, as the imperial leader of all the peoples around the Mediterranean. Italy was not to sink to the level of these peoples nor to be merely one of them. We have seen the sturdy virtues of earlier Roman character undermined and corrupted by sudden wealth and power before Italy had had a chance to become a nation. Augustus made a remarkable effort to undo all this damage and restore the fine old days of rustic Roman virtue, the good old Roman customs, the beliefs of the fathers. To meet increasing divorce, laws designed to add to the permanence of marriage were passed. The oriental gods, so common for centuries in Greece and long widespread in Italy, were to be banished. The people were urged to awaken their declining interest in the religion of their fathers, and the old religious feasts were celebrated with increased splendor and impressiveness. At the same time the state temples, which had frequently fallen into decay, were repaired; new ones were built, especially in Rome; and the services and usages of Roman state religion were everywhere revived.

Tendencies like those which had changed the Roman people lie too deep in the life and the nature of men to be much altered by the power of a government or the pressure of new laws. It was a new world in which the Romans of the Augustan Age were living. The more Augustus applied his own power to modify the situation, the more noticeable became the contrast between the Augustan Age and the old days be-

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fore one-man power arose. Under Augustus, Rome for the first time received organized police, a fire department, a water department, and a fully organized office for the government sale of grain. Augustus himself boasted that he found Rome a city of brick and left it a city of marble. To the visitor at Rome, therefore, the new age proclaimed itself in imposing new buildings; for republican Rome had lacked the magnificent monumental theaters and gymnasia, libraries and music halls, which had long adorned the greater Hellenistic cities. It had also, of course, possessed no royal palace, like that at Alexandria. Architecturally, Alexandria was still the most splendid city of the ancient world.

The great architectural works which Augustus now began made Rome the leading art center of the ancient world. His building plans were in the main those which his adoptive father, the Great Dictator, had himself either laid out or already begun. On the Palatine Hill Augustus united several dwelling houses, already there, into a palace for his residence. It was very simple, and the quiet taste of his sleeping room, which long survived the rest of the building, was the admiration of later Romans. From this royal dwelling on the *Palatine* arose our English word "palace." A new and sumptuous temple of Apollo surrounded by colonnades, in which the emperor installed a large library, was erected within easy reach of his palace doors.

The palace looked down upon an imposing array of new marble buildings surrounding the ancient Forum. Nearest the palace the magnificent basilica business hall erected by Cæsar, left unfinished and then damaged by fire, was now restored and completed by Augustus. He also erected a new Senate building, planned but never built by Cæsar, opposite the new basilica. Facing the end of the Forum the emperor now built a temple for the worship of his deified foster father; and at the opposite end of the Forum Augustus placed a magnificent speaker's platform of marble. Behind the ground intended by him for the new Senate building, Cæsar had built a new forum, called the Forum of Cæsar; but the growing business of the city led Augustus to build a third forum,

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known as the Forum of Augustus, which he placed next to that of Cæsar.

The first stone theater in Rome had been built by Pompey about twenty-five years before the accession of Augustus. The emperor, therefore, erected a large and magnificent theater, which he named the Theater of Marcellus, after his deceased

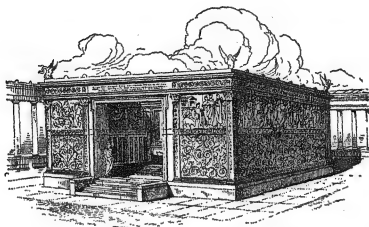


FIG. 161. RESTORATION OF INCLOSURE CONTAINING THE ALTAR OF AUGUSTAN PEACE

This altar was built by the Senate in honor of the Augustan peace established throughout the Empire. It was erected at the time of the great state thanksgiving for the safe return of Augustus from an expedition against the German tribes. The inclosure was open to the sky, and its surrounding walls, of which portions still exist, are covered below by a broad band of ornamental plant spirals, very sumptuous in effect. Above it is a series of reliefs, of which the one on the right of the door pictures the legendary hero Æneas bringing an offering to the temple of the Roman household gods (*Penates*) which he carried from Troy to Latium

son-in-law Marcellus. During this period Agrippa, the ablest of the generals and ministers of Augustus, erected the first fine public baths in Rome, for which he was given space in the Field of Mars, an old drill ground. In connection with it were other splendid public buildings added by Agrippa, and a spacious open square for the Assembly of the people. At the same time the Senate showed its appreciation of the new era of peace by erecting a large and beautiful marble Altar of Peace.

In this new architecture of Rome, Greek models were the

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controlling influence. Nevertheless, oriental influences also were very prominent. Greek architecture did not employ the arch, so long used in the Orient; but the architects of Rome now gave it a place of prominence along with the colonnade. From the Roman buildings the arch gained its important place in our own modern architecture. Augustus seems to have been much interested in the monuments of the ancient oriental world, which he more than once visited. His trium-

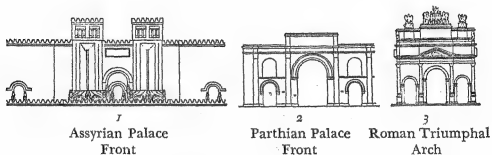


FIG. 162. THE ROMAN TRIUMPHAL ARCH AND ITS ORIENTAL ANCESTORS

The imposing front of the Assyrian palace (1), with its tall arch in the middle and a lower arch on each side, was continued by the Parthians (2), and at the same time they shifted the side arches nearer to the middle arch. The arch made its way slowly westward, although the Greeks were very reluctant to adopt it and did not make full use of it until they were Christianized and began to employ it in their churches. The Romans, on the contrary, were influenced by the Etruscans, who brought the arch with them from Asia Minor. Hence we found it in Rome early, and the triumphal arch of Augustus and other arches of this kind built by the Romans (3) were descendants of the Assyrian palace front, with a tall arch in the middle and lower arches on each side, just as widely traveled Romans had seen it in the East

phal arch was arranged with three gates like the Assyrian palace front. He carried away from the Nile a number of Egyptian obelisks and set them up in Rome, and in building his own family tomb he selected a design from the Orient.

While Roman sculpture always showed Etruscan and Greek influences, it came in time to have certain distinct qualities which we may term Roman. At the end of the Republic these qualities began to be observed. For instance the portrayal of children became much more realistic than ever before, and the Augustan portraits of women are very fine.

THE CIVILIZATION OF THE AUGUSTAN AGE

It is an interesting fact that one of the greatest pieces of sculpture of this period was probably the work of a Gaul.

Painting for the Romans had become a matter of wall decoration. Our room walls dotted with hanging pictures would have been considered by the Romans as rather poor taste. Like the Greeks, the Romans desired to arrange the decorations of a room so as to give a feeling of space—a tendency shown by many of our most modern interior decorators. This attitude of the Romans explains the character of the wall paintings which have been uncovered in ruins at Rome, in the houses of Pompeii, and elsewhere. In these we find great sweeping landscapes, as though seen from a balcony or a window; or buildings are painted in such a manner as to give depth as though the observer saw before him colonnades, gardens, and distant villas.

The decoration of their house interiors became exceedingly important to the wealthy Romans. And so great was their appreciation of the Greek genius that if they could not place in their houses the originals of the famous pieces of Greek sculpture and painting, they were willing to buy copies. Indeed, it seemed as though every Greek who could handle a sculptor's chisel or a painter's brush sat down to make copies of Greek statuary or rushed off to Rome to secure a commission to copy some Greek or Hellenistic painting on the wall of a Roman villa. Many copies of Greek and Hellenistic paintings were made in mosaic.

If Rome was a borrower in art, she was even more so in science. Rome had no such men as Archimedes and Eratosthenes. When Agrippa, Augustus' minister, drew up a great map of the world, all he had in view was the practical use of the map by Roman governors going out to their provinces or by merchants traveling with goods. Hence the roads were elaborately laid out, not on a fixed scale, but so that there would be space enough along each road for the names of all the towns situated along it and for all the distances in miles between towns, which were inserted in figures on the map. Such a map was without doubt convenient; but it entirely lacked the network of latitude and longitude so care-

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fully worked out by Eratosthenes, and for this reason the shapes of the countries and seas were greatly distorted.

The leading geography of the time was written by a Greek living in Rome, named Strabo. It was a delightful narrative of wide travels mingled with history; and, although it sadly lacked in scientific method, it was for many centuries the world's standard geography and may still be read with great pleasure and profit as an ancient book of travel. The work of Strabo, however, is a landmark disclosing the decline of ancient science and the end of that great line of scientists whose achievements made the Hellenistic Age the greatest age of science in the early world.

Indifference to science at Rome was in marked contrast with Roman interest in literature. The greatest of the leading Romans displayed in some cases an almost pathetic devotion to literary studies, even while weighed down with the heaviest responsibilities. Cæsar put together a treatise on Latin speech while crossing the Alps in a palanquin, when his mind must have been filled with the problems of his great wars in Gaul. He dedicated the essay to Cicero, the greatest master of Latin prose. Such men as these had studied in Athens or Rhodes, and were deeply versed in the finest works of Greek learning and literature. Cæsar and Cicero and the men of their class spoke Greek every day among themselves, perhaps more than they did Latin. In these men Hellenistic civilization and Roman character had mingled to produce the most cultivated minds of the ancient world. Among the educated men in the declining Greek communities of the East, none could rival these finest of the Romans in cultivation or in power of mind. Indeed, Greece never produced men of just this type, who exhibited such a combination of gifts—the highest ability both in public leadership and in literary achievement.

Of literary studies Cicero said: "Such studies profit youth and rejoice old age; while they increase happiness in good fortune, they are in affliction a consolation and a refuge; they give us joy at home and they do not hamper us abroad; they tarry with us at night time and they go forth with us to the countryside." Thus spoke the most cultivated man Rome

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ever produced, and the ideals of the educated man which he himself personified have never ceased to exert a powerful influence upon educated men in all lands. When he failed as a statesman, a career for which he did not possess the necessary firmness and practical insight, he devoted himself to his literary pursuits. As the greatest orator in Roman history, he had already done much to perfect and beautify Latin prose in the orations which he delivered in the course of his career as a lawyer and a statesman. But after his retirement he produced a group of remarkable essays on oratory, a series of treatises on conduct—such matters as friendship, old age, and the like; and he left behind also several hundred letters which were preserved by his friends. As one of the last sacrifices of the civil wars, Cicero had fallen by the hands of Antony's brutal soldiery; but his writings were to exert an undying influence. They made Latin speech one of the most beautiful instruments of human expression; and as an example of the finest literary style they have influenced the best writing in all the languages of civilization ever since.

Augustus and a number of the leading men about him had known Cicero. For them that commingling of Greek and Roman civilization, which might well be called Ciceronian, became the leading cultivated influence in their lives. The Ciceronian culture of the last days of the dying Republic thus became the ideal of the early Empire and the Augustan Age. Augustus had early established two libraries in Rome, and one of them contained the greatest collection of both Greek and Latin books in the ancient world. Men steeped in this Greco-Roman culture now began to feel the influence of the great events which had built up the vast Roman Empire. As at Athens in the days of the greatest Athenian power, so the vision of the greatness of the state stirred the imagination of thinking men. Livy wrote an enormous history of Rome from the earliest times, that is to say, from the Trojan War, to the reign of Augustus, in one hundred and forty-two rolls—a work which cost him forty years of labor. While it was beautiful literature and the fragments which survive still form fascinating reading, it was very inaccurate history. The care-

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ful historical method that had made Thucydides the greatest of ancient historians had disappeared.

In the last days of the Republic, in spite of turbulence and civil war, Cicero and the men of his time had perfected Latin *prose*. On the other hand, the greatest of Latin *poetry* arose under the inspiration of the early Empire and the universal peace established by Augustus. Horace, the leading poet of the time, had been a friend of the assassins of Cæsar, and he had faced the future Augustus on the battlefield of Philippi. After a struggle he had saved himself and at last found security in the era of peace. Having lived through many dangers to rejoice in the general peace, he gained the forgiveness and friendship of Augustus. In his youth, although only the son of a freedman of unknown race, he had studied in Greece, and he knew the old Greek lyric poets, who had suffered danger and disaster as he himself had done. With the haunting echoes of old Greek poetry in his soul, he now found his own voice. Then he began to write of the men and the life of his own time in a body of verse which forms for us an undying picture of the Romans in the days of Augustus. The poems of Horace will always remain one of the greatest legacies from the ancient world—a treasury of Roman life as pictured by a ripe and cultivated mind, unsurpassed even in the highly developed literature of the Greeks.

Virgil, the other great poet of the Augustan Age, had from the beginning been a warm admirer of the great Cæsar and the young Octavian. When the civil war had deprived Virgil of his ancestral farm under the shadow of the Alps in the north, it was restored to him by Augustus. Here, as he looked out upon his own fields, the poet began to write verses like those of Theocritus, reflecting to us in all its poetic beauty the rustic life of his time on the green hillsides of Italy. But these imitations of Greek models would never have given Virgil his place as one of the greatest poets of the world. As time passed he gained an exalted vision of the mission of Rome, and especially of Augustus, as the restorer of world peace. More than one Latin epic was already in circulation;

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but in order to give voice to his vision Virgil now undertook the creation of another epic, in which he pictured the wanderings of the Trojan hero Æneas from Asia Minor to Italy, where in the course of many heroic adventures he founded the royal line of Latium. From him, according to the story, were descended the Julian family, the Cæsars, whose latest leader Augustus had saved Rome and established a world peace.

Unlike the Homeric epics, Virgil's Æneid, as it is called, was not the outgrowth of a heroic age. It was a tribute to Augustus, whom the poem artistically placed against a glorious background of heroic achievement in the Trojan Age, just as Alexander the Great had contrived to do for himself. The Æneid was therefore the product of a self-conscious, literary age—the highly finished work of a literary artist who now took his place with Horace as one of the great interpreters of the period. Hardly so penetrating a mind as his friend Horace, Virgil was perhaps an even greater master of Latin verse. Deeply admired by the age that produced it, the Æneid has ever since been one of the leading schoolbooks of the civilized world, and has had an abiding influence on the best literature of later times.

Augustus himself also left an account of his deeds.¹ When he was over seventy-five years old, as he felt his end approaching, he put together a narrative of his career, which was engraved on bronze tablets and set up before his tomb. In the simple dignity of this impressive story we see the career of Augustus unfolding before us in one grand achievement after another, rising like a panorama of successive mountain peaks, in a vision of such grandeur as to make this piece of writing probably the most impressive brief record of a great man's life which has survived to us from the ancient world. Almost with his last breath Augustus penned the closing lines of this remarkable document, and on the nineteenth of August, the month which bears his name, in the year A.D. 14 the first of the Roman emperors died.

¹ This is called *Res Gestæ Divi Augusti*. A copy in Greek and Latin (known as the *Monumentum Ancyranum*) survives on the walls of the Augusteum at Ancyra (Ankara) in Asia Minor; and fragments have been found elsewhere.

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The Line of Augustus and the End of the First Century of Peace

Augustus had been in supreme control of the great Roman world for forty-four years; that is, nearly half a century. Four descendants of his family, by either blood or adoption, were to rule for more than another half century (A.D. 14-68) and thus to fill out the first century of peace. The prejudice against one-man power was still so strong that the writers of this age and their successors have transmitted to us very unfair accounts of these four rulers. Two of them were indeed deserving of the contempt in which they are still held; but the other two were in many respects able rulers, who did much to improve the developing government of the Empire.

Augustus had never put forward a law providing for the appointment of his successor or for later successors to his position. Any prominent Roman citizen might have aspired to the office. Augustus left no son, and one after another his male heirs had died, among them his grandsons, the sons of his daughter Julia. He had finally been obliged to ask the Senate to associate with him his stepson Tiberius, his wife's son by an earlier marriage. Before the death of Augustus, Tiberius had been given joint command of the army and also the tribune's power. The Senate, therefore, at once appointed him to all his stepfather's powers, and without any limit as to time.

Tiberius was an able soldier and an experienced man of affairs. He gave the provinces wise and efficient governors and showed himself a skilled and successful ruler (A.D. 14-37). He did not, however, possess his stepfather's tact and respect for the old institutions. He found it very vexatious to carry on joint rule with a Senate whose power was in reality little more than a fiction. He felt only contempt for the Roman nobles who publicly did him homage and secretly slandered him or plotted his downfall. He likewise despised the Roman populace. Under Augustus they had continued to go through the form of electing magistrates and passing laws as in the days of the Republic, but of course both the magistrates they elected

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and the laws they passed had been those proposed to the assemblies by Augustus. Tiberius, however, no longer allowed the Roman rabble to go through the farce of voting on what the emperor had already decided, and even the appearance of a government by the Roman people thus finally disappeared forever. To complete his unpopularity in Rome, Tiberius also practiced strict economy in government and much reduced the funds devoted to public shows for the amusement of the people. Universally hated in Rome, greatly afflicted also by bereavements and disappointments in his private life, Tiberius left the city and spent his last years in a group of magnificent villas on the lofty island of Capri, overlooking the Bay of Naples, where he died a disappointed man.

As Tiberius had lost his son, the choice for his successor fell upon Gaius Cæsar, a great-grandson of Augustus, nicknamed Caligula ("little boot") by the soldiers among whom he was brought up. A young man of only twenty-five years, and at first very popular in Rome, Caligula was so transformed by his sense of vast power and by long-continued dissipation that his mind was crazed. He made his horse a consul, and the enormous wealth saved for the state by Tiberius he squandered in reckless debauchery and absurd building enterprises. In the midst of confiscation and murder, this mockery of a reign was brought to a sudden close by Caligula's own officers, who put an end to his life in his palace on the Palatine after he had reigned only four years (A.D. 37-41).

The imperial guards, ransacking the palace after the death of Caligula, found in hiding the trembling figure of a nephew of Tiberius and uncle of the dead Caligula, named Claudius. He had always been merely tolerated by his family as a man both physically and mentally inferior. He was now fifty years old, and there is no doubt that he was weak-kneed both in body and in character. But the guards hailed him as emperor, and the Senate was obliged to consent. Claudius was a great improvement upon Caligula, although he was easily influenced by the women of his family and the freedman officials whom he had around him. The palace therefore soon became a

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nest of plots and intrigues, in which slander, banishment, and poison played their evil parts.

Nevertheless Claudius accomplished much for the Empire and devoted himself to its affairs (A.D. 41-54). He conducted in person a successful campaign in Britain, and for the first time made its southern portion a province of the Empire.

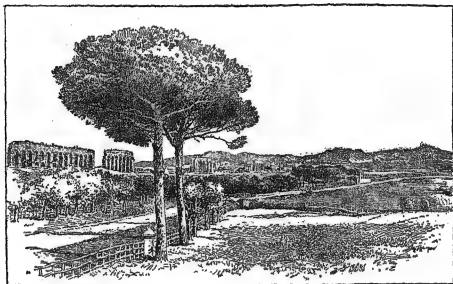


FIG. 163. THE AQUEDUCT OF THE EMPEROR CLAUDIUS

This wonderful aqueduct, built by the Emperor Claudius about the middle of the first century A.D., is over 40 miles long. About three-fourths of it is subterranean, but the last 10 miles consists of tall arches of massive masonry, as seen here, supporting the channel in which the water flowed till it reached the palace of the emperor on the Palatine. In plan it is derived from the older aqueducts which the Romans had seen in the Near East (see Fig. 68). The ancient Roman aqueducts were so well built that four of them are still in use at Rome, and they convey to the city a more plentiful supply of water than any great modern city elsewhere receives

Britain remained a Roman province for three and a half centuries. At Rome Claudius was greatly interested in buildings and practical improvements. He built two vast new aqueducts, together nearly a hundred miles in length, furnishing Rome with a plentiful supply of fresh water from the mountains. At the same time his own officials, chiefly able Greek freedmen who were aiding him in his duties, were beginning to form a kind of cabinet destined finally to give the Empire

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for the first time a group of efficient ministers, whom we would call the Secretary of the Treasury, the Secretary of State, and so on.

The inability of Claudius to select wisely and to control those who formed his circle was the probable cause of his death. It was also the reason why Agrippina, the last of his wives, was able to push aside the son of Claudius and gain the throne for her own son Nero as the successor of Claudius. Not only on his mother's side, but also on his father's, Nero was descended from the family of Augustus. His mother had intrusted his education to the philosopher Seneca, and for the first five years of his reign, while Seneca was his chief minister, the rule of Nero was wise and successful. When palace plots and intrigues, in which Seneca was not without blame, had removed this able minister from the court and had also banished Nero's strongminded mother, Agrippina, he cast aside all restraint and followed his own evil nature in a career of such vice and cruelty that the name of Nero has ever since been regarded as one of the blackest in all history.

Nero was devoted to art and wished personally to practice it. While the favorites of the palace carried on the government, he toured the principal cities of Greece as a musical composer, competing for prizes in dancing, singing, and chariot races. As the companion of actors, sportsmen, and prize fighters, he even took part in gladiatorial exhibitions. Becoming more and more entangled in the meshes of court plots, his cowardly and suspicious nature led him to condemn his old teacher, Seneca, to death, to cause the assassination of the son of Claudius and of many other innocent and deserving men. In the same way he was persuaded to take the life of his wife, and to crown his infamy had even his own mother assassinated. Finally his wild extravagance, his excessive taxation in some of the provinces, and his murders among the rich and noble stirred up dangerous dissatisfaction, which resulted in his fall.

A great disaster, meantime, took place in Rome. A fire broke out among the cheap wooden buildings around the circus. It swept over the Palatine Hill, destroying the palace of Au-

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gustus, leaving only his sleeping room, and then passed on through the city. It burned for a week, wiping out a large portion of the city, and then, breaking out again, increased the damage. Dark rumors ran through the streets that Nero himself had set fire to Rome that he might rebuild it more splendidly, and gossip told how he sat watching the conflagration while giving a musical performance of his own on the destruction of Troy. There is no evidence to support these rumors. Indeed, Nero's relief work for those made homeless by the fire was so thorough and efficient that it would not compare disadvantageously with that of our own government officials during the floods of 1937. It would seem, however, that Nero knew that he was accused of incendiarism, and in order to distract attention from himself, he welcomed the report that the Christians had started the fire. Certain it is that he executed a large number of them with horrible tortures.

At vast expense, to which much of his excessive taxation was due, Nero undertook the rebuilding of the city. As the circumstances and time seemed propitious, he began the erection of an enormous imperial palace called the "Golden House," which extended across the ground where the Colosseum now stands, from the east end of the Forum eastward and northeastward over the Esquiline Hill. At the entrance was a colossal bronze statue of himself over a hundred feet high. There can be no doubt that Nero's interest in art was sincere and that he really desired to make Rome a beautiful city.

The dissatisfaction at Rome and Nero's treatment of the only able men around him deprived him of support there. Then the provinces began to chafe under heavy taxation. When the discontent in the provinces finally broke out in open revolt, led especially by Galba, a Roman governor in Spain, Nero showed no ability to meet the revolt. The rebellious troops marched on Rome. Nero went into hiding and, on hearing that the Senate had voted his death, he theatrically stabbed himself; attitudinizing to the last, he passed away uttering the words, "What an artist dies in me!" Thus died

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in A.D. 68 the last ruler of the line of Augustus, and with him ended the first century of peace.

In spite of the misrule which had attended the reigns of two of the line of Augustus, the good accomplished in the reigns of Tiberius and Claudius could not be wholly undone. Both at Rome and in the provinces, the government had been much improved. But, as we have seen, the Roman state was fast becoming a monarchy in which the crown was bequeathed from father to son. This process had been hastened by the fact that the Cæsars, as the emperors were now called, had gained a position of unique reverence. Beginning with Julius Cæsar, the emperors,¹ like Alexander the Great, were deified, and their worship was widely practiced throughout the Empire. It was indeed an obligation of citizenship to pay divine homage to the emperor. The supreme place which he now occupied was not to be endangered by the brief struggles which followed the death of Nero; and the wide rule of the Roman emperor, even after the fall of Julius Cæsar's line, was to maintain another century of prosperity and peace. To this second century of peace in the Roman Empire we must devote another chapter.

¹ Besides Julius Cæsar and Augustus, Claudius was the only emperor of the Julian line who was deified. Tiberius failed of it because of his unpopularity, and Caligula and Nero, of course, because of their infamous characters.

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CHAPTER XXVIII

THE SECOND CENTURY OF PEACE AND THE CIVILIZATION OF THE EARLY ROMAN EMPIRE

*The Emperors of the Second Century of Peace (Beginning
A.D. 69)*

FOR about a year after the death of Nero the struggle among the leading military commanders for the throne of the Cæsars threatened to involve the Empire in another long civil war. Fortunately the troops of Vespasian, a very able commander in the East, were so strong that he was easily victorious, and in A.D. 69 he was declared emperor by the Senate. With him, therefore, began a second century of peace under a line of able emperors who brought the Empire to the highest level of prosperity and happiness. We shall first sketch the political and military activities of these emperors and then turn to the life and civilization of the Empire as a whole during the second century of peace.

Even though remote wars broke out on the frontiers or in distant provinces, they did not disturb the peace of the Empire as a whole. Before his election as emperor, Vespasian had been engaged in crushing a revolt of the fanatical Jews in Palestine, and the next year his able son Titus captured and destroyed Jerusalem amid frightful massacres which exterminated large numbers of the rebellious Jews (A.D. 70). It was later found necessary to forbid all Jews from entering their beloved city, consecrated by so many sacred memories; and it was made a Roman colony under a different name. Judea at the same time became a Roman province.

Two great tasks were accomplished by the emperors of the age we are discussing: first, that of perfecting the system of defenses on the frontiers, and second, that of more fully developing the government and administration of the Empire. Let us look first at the frontiers. On the south the Empire was protected by the Sahara and on the west by the Atlantic; but on the north and east it was open to attack. The shifting German tribes constantly threatened the northern frontiers; while in the east the frontier on the Euphrates was made chronically

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unsafe by the Parthians, the only civilized power still unconquered by Rome.

The pressure of the barbarians on the northern frontiers, which we recall in the time of Marius, was the continuance of the vast movement with which we are already acquainted—the tide of migration which long before had swept the Indo-European peoples to the Mediterranean and had carried the Greeks and the Romans into their two Mediterranean peninsulas. Mediterranean civilization was thus in constant danger of being overwhelmed from the north, just as the splendid Ægean civilization was once submerged by the incoming of the Greeks. The great problem for future humanity was whether the Roman emperors would be able to hold off the barbarians long enough so that in course of time these rude northerners might gain enough of Mediterranean civilization to respect it and to preserve at least some of it for mankind in the future.

The Flavian family, as we call Vespasian and his two sons, did much to make the northern frontiers safe (A.D. 69-96). After the mild and kindly rule of Vespasian's son Titus, the latter's brother, Vespasian's second son Domitian, adopted the frontier lines laid down by Augustus and planned their fortification with walls wherever necessary. He began the protection of the exposed border between the upper Rhine and the upper Danube. In Britain, Domitian even pushed the frontier further northward and then erected a line of defenses. But on the lower Danube he failed to meet the dangerous power of the growing kingdom of Dacia. He even sent gifts to the Dacian king, intended to keep him quiet and satisfied. By this unwise policy Domitian created a difficult problem in this region, to be solved by his successors.

The brief and quiet reign of the senator Nerva, who was selected by the Senate to succeed Domitian (A.D. 96), left the whole dangerous situation on the lower Danube to be met by the brilliant soldier Trajan, who followed Nerva in A.D. 98. He quickly discerned that there would be no safety for the Empire along the Danube frontier, except by crossing the river and crushing the Dacian kingdom. Bridging the Danube with

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boats and hewing his way through wild forests, Trajan led his army through obstacles never before overcome by Roman troops (A.D. 101-106). He captured one stronghold of the Dacians after another, and in two wars finally destroyed their capital. Thereupon the Dacian king and his leading men took their own lives. Trajan built a massive stone bridge across



FIG. 164. THE EMPEROR TRAJAN SACRIFICING AT HIS NEW BRIDGE ACROSS THE DANUBE

In the background we see the heavy stone piers of the bridge, supporting the wooden upper structure, built with strong railings. In the foreground is the altar, beside which the emperor stands at the right, with a flat dish in his right hand, from which he is pouring a libation upon the altar. At the left of the altar stands a priest, naked to the waist and leading an ox to be slain for the sacrifice. A group of the emperor's officers approach from the left, bearing army standards. The scene is sculptured with many others on the column of Trajan at Rome, and is one of the best examples of Roman relief sculpture of the second century

the Danube, made Dacia a Roman province, and sprinkled plentiful Roman colonies on the north side of the great river. The descendants of these colonists in the same region still call themselves *Roumanians* and their land *Roumania*, a form of the word "Roman." Trajan's vigorous policy quieted all trouble along the lower Danube for a long time.

The military glory of Rome, which had declined since the days of Cæsar, revived in splendor under this great soldier-

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emperor. Trajan next turned his attention to the eastern frontier, extending from the east end of the Black Sea southward to the Peninsula of Sinai. In the northern section of this frontier a large portion of the boundary was formed by the upper Euphrates River. Rome thus held the western half of the Fertile Crescent, but it had never conquered the eastern half, with Assyria and Babylonia. Here the powerful kingdom of the Parthians, kindred of the Persians, had maintained itself with ups and downs since the days of the early Seleucids, for three hundred and fifty years. Twice before they had defeated Roman expeditions sent against them. Trajan, however, dreamed of a great oriental empire like that of Alexander. He led an army against the Parthians and defeated them (A.D. 115-117). He added Armenia, Mesopotamia, and Assyria to the Empire as new provinces. He visited the ruins of Babylon to behold the spot where, four hundred and forty years before, Alexander had died; but he said he "saw nothing worthy of such fame, but only heaps of rubbish, stones, and ruins." Then a sudden rebellion in his rear forced him to a dangerous retreat. Weakened by sickness and bitterly realizing that his great expedition was a failure, he died in Asia Minor while returning to Rome (A.D. 117).

Trajan's successor, Hadrian (A.D. 117-138), was another able soldier, but he had also the judgment of a statesman. He made no effort to continue Trajan's conquests in the East. On the contrary, he wisely gave them all up except the Peninsula of Sinai and brought the frontier back to the Euphrates. But he retained Dacia and strengthened the whole northern frontier, especially the long barrier reaching from the Rhine to the Danube, where the completion of the continuous wall was largely due to him. He built a similar wall along the northern boundary across Britain. The line of both these walls is still visible. As a result of these wise measures and the impressive victories of Trajan, the frontiers were safe and quiet for a long time. Nor was there any serious disturbance until a great overflow of the northern barbarians (A.D. 167) in the reign of Marcus Aurelius brought to an end the second century of peace.

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Under Trajan and Hadrian the army which defended these frontiers was the greatest and most skillfully managed organization of the kind which the ancient world had ever seen. Drawn from all parts of the Empire, the army now consisted of all possible nationalities, like the British army in the World War. A legion of Spaniards might be stationed on the Euphrates, or a group of youths from the Nile might

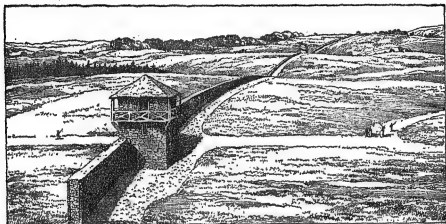


FIG. 165. RESTORATION OF THE ROMAN FORTIFIED WALL ON THE GERMAN FRONTIER

This masonry wall, some three hundred miles long, protected the northern boundary of the Roman Empire between the upper Rhine and the upper Danube, where it was most exposed to German attack. At short intervals there were blockhouses along the wall; at points of great danger, strongholds and barracks (Fig. 166) for the shelter of garrisons

spend many years in sentry duty on the wall that barred out the Germans. Although far from home, such young men could communicate easily with their friends at home by a very efficient military postal system covering the whole Empire like a vast network. We are still able to hold in our hands the actual letters written from a northern post by a young Egyptian recruit in the Roman army to his father and sister in a distant little village on the Nile. When not on sentry duty somewhere along the frontier line, such a young soldier lived with his comrades in one of the large garrisons maintained at the most important frontier points, with fine barracks and living quarters for officers and men. The dis-

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cipline necessary to keep the troops always ready to meet the barbarians outside the walls was never relaxed. Besides regular drill, the troops were also employed in making roads, erecting bridges and public buildings, repairing the frontier walls, and especially in building vast aqueducts.

Meantime the Empire had been undergoing important changes within. The emperors developed a system of govern-

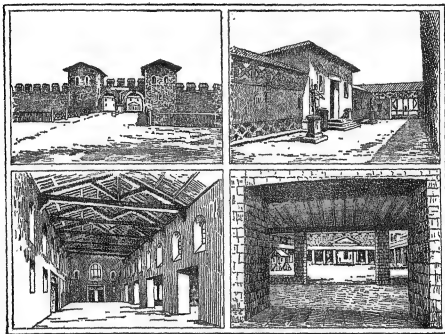


FIG. 166. GLIMPSES OF A ROMAN FRONTIER STRONGHOLD (RESTORED AFTER WALTZE-SCHULZE)

ment departments already foreshadowed in the time of Claudius. To manage them, they appointed Roman knights. There thus grew up a body of experienced administrators as heads of departments and their helpers, who carried on the government of the Empire. It was the wise and efficient Hadrian who accomplished the most in perfecting this organization of the government business. Thus after Rome had been for more than three centuries in control of the Mediterranean world, it finally possessed a well-developed government organization such as had been in operation in the Orient since the days of the pyramid builders.

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Among many changes, one of the most important was the abolition of the system of "farming" taxes, to be collected by private individuals—a system which had caused both the Greeks and the Romans much trouble. Government tax collectors now gathered in the taxes of the great Mediterranean world. It is interesting to recall that such a system had been fully organized on the Nile over three thousand years before the Romans possessed it.

With the complete control of these departments entirely in his own hands, the power of the emperor had much increased. From being the first citizen of the state, like Augustus, ruling

* This Egyptian youth, APION, having enlisted in the Roman army in company with other boys from his little village in Egypt, bade his family good-by and embarked on a great government ship from Alexandria for Italy. After a dangerous voyage he arrived safely at Misenum, the Roman war harbor near Naples, and hastened ashore in his new uniform to have a small portrait of himself painted and to send his father the letter on the opposite page. It was written for him in Greek, on papyrus, in a beautiful hand by a hired public letter-writer, and reads as follows (with the present author's explanations in brackets): "Apion to Epimachos his father and lord, many good wishes! First of all I hope that you are in good health, and that all goes well with you and with my sister and her daughter and my brother always. I thank the lord Serapis [a great Egyptian god] that he saved me at once when I was in danger in the sea. When I arrived at Misenum, I received from the emperor three gold pieces [about fifteen dollars] as road money, and I am getting on fine. I beg of you, my lord father, write me a line, first about your own well-being, second about that of my brother and sister, and third in order that I may devotedly greet your hand, because you brought me up well and I may therefore hope for rapid promotion, the gods willing. Give my regards to Capiton [some friend] and my brother and sister and Serenilla and my friends. I send you by Euktemon my little portrait. My [new Roman] name is Antonius Maximus. I hope that it may go well with you." On the left margin, where we see two vertical lines inserted, just as we are accustomed to insert them, Apion's chums (the other village boys who enlisted with him) sent home their regards. Folded and sealed as in Fig. 137, the letter went by the great Roman military post, arrived safely, and was read by the young soldier's waiting father and family in the little village on the Nile over seventeen hundred years ago. Then, years later, after the old father had died, it was lost in the household rubbish, and there the modern excavators found it among the crumbling walls of the house. The ancient letter had some holes in it; but with it was another letter written by our soldier to his sister years later, after he had long been stationed somewhere on the Roman frontier and had a wife and children of his own. And that is all that the rubbish heaps of the village on the Nile have preserved of this lad who entered the army of the great Roman Empire in the second century A.D.

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jointly with the Senate, the emperor had thus become a sovereign, whose power was so little limited by the Senate that he was not far from being an absolute monarch. Furthermore, the emperors of the second century of peace secured laws and regulations which made the rule of the emperor legal, although they unfortunately passed no laws providing for a successor on the death of an emperor, and dangerous conflict might ensue whenever an emperor died.

At the same time an important change in the position of Italy was taking place. The condition of the farmers was now so bad that there was danger of the complete disappearance of free population in the country districts of Italy. Two of the emperors, Nerva and Trajan, even set aside large sums as capital to be loaned at a low rate of interest to farmers needing money. This interest was to be used to support poor free children in the towns of Italy in the hope that a new body of free country population might be thus built up. This

remarkable effort, one of the earliest known government plans for "farm relief," was, however, not successful. As Italy was furthermore not a manufacturing country, its citizenship declined. Meantime a larger idea of the Empire had displaced the conception of Augustus, who had desired to see the Empire a group of states led and dominated by Italy. Whole provinces, especially in the West, had been granted citizenship, or a modified form of it, by the emperors. Influential citizens in the provinces were often given high rank and office at Rome.

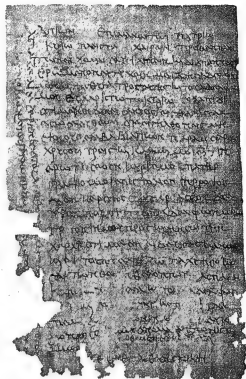


FIG. 167. LETTER OF APION, A YOUNG SOLDIER IN THE ROMAN ARMY, TO HIS FATHER, EPIMACHOS, IN EGYPT*

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As a result there had now grown up a Mediterranean nation, as we have seen it foreshadowed even in the time of Augustus, and Italy dropped to a level with the provinces.

Not only did the subjects of this vast state pay their taxes into the same treasury, but they were now controlled by the same laws. The lawyers of Rome under the emperors we are now discussing were the most gifted legal minds the world had ever seen. They expanded the narrow *city-law* of Rome that it might meet the needs of the whole Mediterranean world. They laid the foundations for a vast imperial code of laws, the greatest work of Roman genius. In spirit, these laws of the Empire were most fair, just, and humane. Some of the most learned justices, Julianus, Pomponius, and Gaius were encouraged by the interest of the emperors Hadrian and Antoninus Pius to write such important digests and histories of law that their material was of great use to later writers and many of the principles are still part of our own law. Even slaves now enjoyed the protection of the law, and the slave could not be put to death by the master as formerly, although we should notice that in some important matters the Roman law treated a citizen according to his social rank, showing partiality to the noble in preference to the common citizen. These laws did much to unify the peoples of the Mediterranean world into a single nation; for they were now regarded by the law not as different nations but as subjects of one great state, which extended to all of them the same protection of justice, law, and order. Moreover the earlier laws long developed by the older city-states were not interfered with by Rome where they did not conflict with the interests of the Empire.

The Empire as a whole was still organized in provinces, which steadily increased in number. Within each province by far the large majority of the people lived in towns and cities. Such a city and its outlying communities formed a city-state like that which we found in early Greece. Each city had the right to elect its own governing officials and to carry on its own local affairs. The people took an interest in local affairs, and there was a good deal of rivalry for election to the public

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offices. On the walls at Pompeii we still find the appeals of rival candidates for votes. At the same time each city was under the sovereignty of the Roman Empire and the control of the Roman governor of the province.

Able and conscientious governors were now controlling affairs all over the Empire. The letters written to Trajan by the younger Pliny, governor of Bithynia in Asia Minor, regarding the interests of his province reveal to us both his own faithfulness and the enormous amount of provincial business which received the emperor's personal attention. Such attention by emperors like Trajan and Hadrian relieved the communities of much responsibility for their own affairs. Hadrian traveled for years among the provinces and became very familiar with their needs. Hence the local communities inclined more and more to depend upon the emperor, and interest in public affairs declined. Along with growing imperial control of the provinces, there thus began a decline in the sense of responsibility for public welfare. This was eventually a serious cause of general decay, as we shall see.

The Civilization of the Early Roman Empire: the Provinces

Here was a world of sixty-five to a hundred million souls girdling the entire Mediterranean. Had human vision been able to penetrate so far, we might have stood at the Strait of Gibraltar and followed these peoples as our eyes swept along the Mediterranean coasts through Africa, Asia, and Europe, and thus back to the strait again. On our right in Africa would have been Moors, North Africans, and Egyptians; in the eastern background, Arabs, Jews, Phœnicians, Syrians, Armenians, and Hittites; and, as our eyes returned through Europe, Greeks, Italians, Gauls, and Iberians (Spaniards); while north of these were the Britons and some Germans within the frontier lines. All these people were of course very different from one another in native manners, clothing, and customs, but they all enjoyed Roman protection and rejoiced in the far-reaching Roman peace. For the most part, as we have seen, they lived in cities, and the life of the age was pre-

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vailing a city life, even though many of the cities were small.

Fortunately one of the provincial cities has been fairly well preserved for us. The little town of Pompeii, covered with volcanic ashes in the brief reign of Titus, still shows us the very streets and houses, the forum and the public buildings,

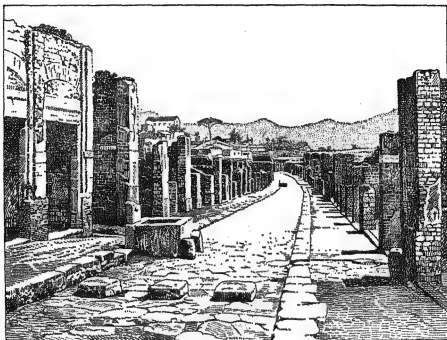


FIG. 168. A STREET IN ANCIENT POMPEII AS IT APPEARS TODAY

The pavement and sidewalk are in perfect condition, as when they were first covered by the falling ashes. At the left is a public fountain, and in the foreground is a street crossing. Of the buildings on this street only half a story still stands, except at the left, where we see the entrances of two shops, with the tops of the doors in position and the walls preserved to the level of the second floor above

the shops and the markets, and a host of other things very much as we might have found them if we had been able to visit the place before the disaster (A.D. 79). We can look down long streets where the chariot wheels have worn deep ruts in the pavement; we can enter dining rooms with charming paintings still on the walls; we can look into the bakers' shops with the charred bread still in the ovens and the flour mills standing silent and deserted; or we can peep into kitchens

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with the cooking utensils still scattered about and the cooking hearth in perfect order for building another fire. The very life of the people in the early Roman Empire seems to rise before us as we tread the now silent streets of this wonderfully preserved place.

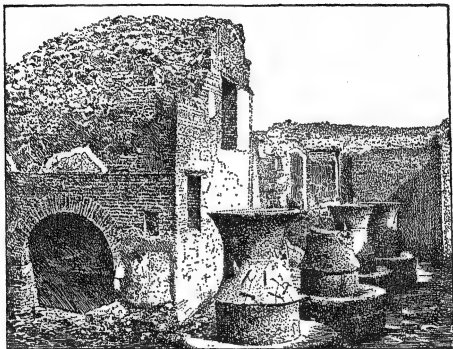


FIG. 169. BAKERY WITH MILLSTONES STILL IN POSITION AT POMPEII

In a court beside the bakery we see the mills for grinding the baker's flour. Each mill is an hourglass-shaped stone, which is hollow, the upper part forming a funnel-shaped hopper into which the grain is poured. The lower part of the stone is an inverted funnel placed over a cone-shaped stone inside it. The grain drops between the inner stone and the outer, and when the outer stone is turned by a long timber inserted in its side, the grain is ground between the two

Pompeii was close beside the Greek cities of southern Italy, and we at once discover that the place was essentially Hellenistic in its life and art. Indeed, from southern Italy eastward we should have found the life of the world controlled by Rome to be simply the natural outgrowth of Hellenistic life and civilization. In some matters there had been great progress. This was especially true of intercourse and rapid communication. Everywhere the magnificent Roman roads,

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massively paved with smooth stone, like a town street, led straight over the hills and across the rivers by imposing bridges. Some of these bridges still stand and are in use today. Near the cities there was much traffic on such a highway.

One met the ponderous coach of the Roman governor, perhaps returning from his province to Rome. The curtains are

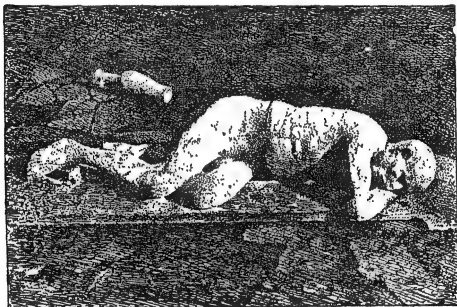


FIG. 170. A VICTIM OF THE ERUPTION OF VESUVIUS, A.D. 79

This man was one of those who were unable to make their escape from the doomed city of Pompeii. The fine volcanic ashes settled around the man's body, and these rain-soaked ashes made a cast of his figure before it had perished. After the body had decayed, it left in the hardened mass of ashes a hollow mold, which the modern excavators poured full of plaster and thus secured a cast of the figure of the unfortunate man just as he lay smothered by the deadly ashes which overwhelmed him over eighteen hundred years ago

drawn and the great man is comfortably reading or dictating to his stenographer. Behind him trots a peddler on a donkey, which he quickly draws to one side to make room for a cohort of Roman legionaries marching with swinging stride, their weapons gleaming through a cloud of dust. Following them rides an officer accompanied by a shackled prisoner going up to Rome for trial. He is a Christian teacher named Paul. A young dandy, exhibiting the paces of his fine horse to two

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ladies riding in a palanquin, grudgingly vacates the road before a rider of the imperial post who comes clattering down the next hill at high speed. Often the road is cumbered with long lines of donkeys laden with bales of goods or caravans of heavy wagons creaking and groaning under their heavy loads of merchandise—the freight trains of the Roman Empire. As for passenger trains, the traveler must resort to the horse coach or small special carriage or ride his own horse. The speed of travel and communication was fully as high as that maintained in Europe and America a century ago, before the introduction of the steam railway, and before the roads were paved or kept in repair.

Indeed, the good Roman roads showed marked advance over the Hellenistic Age. By sea, however, the chief difference was the freedom from the old-time pirates. From the splendid harbor laid out at the mouth of the Tiber by Claudius, the traveler could take a large and comfortable ship for Spain and land there in a week. The Roman whose son was studying in Athens dispatched a bank draft for the youth's university expenses, and a week later the boy could be spending the money. A Roman merchant could send a letter to his agent in Alexandria in ten days. The huge government corn ships that plied regularly between the Roman harbors and Alexandria were stately vessels carrying several thousand tons. They could accommodate an Egyptian obelisk weighing from three to four hundred tons, which the emperor desired to erect in Rome, besides a large cargo of grain and several hundred passengers. Good harbors had everywhere been equipped with docks, and lighthouses modeled on that at Alexandria guided the mariners into every harbor. In winter, however, sea traffic stopped.

Under these circumstances business flourished as never before. The good roads led merchants to trade beyond the frontiers and to find new markets. Goods found their way from Italy even to the northern shores of Europe and Britain, whence great quantities of tin passed up the Seine and down the Rhone to Marseilles. At the other end of the Empire the discovery of the seasonal winds in the Indian Ocean led to a

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great increase of trade with India, and there was a fleet of a hundred and twenty ships plying regularly across the Indian Ocean between the Red Sea and the harbors of India. The wares which they brought crossed the desert by caravan from the Red Sea to the Nile and were then shipped west from the docks of Alexandria, which still remained the greatest commercial city on the Mediterranean—the Liverpool of the Roman Empire. It shipped, besides East Indian luxuries, Egyptian papyrus, linen, rich embroideries, the finest of glassware, great quantities of grain for Rome, and a host of other things. There was a proverb that you could get everything at Alexandria except snow. Along the northern roads of the Eastern world was the caravan connection with China, which continued to bring silk goods to the Mediterranean. It will be seen then that a vast network of commerce covered the ancient world from the frontiers of China and the coast of India on the east to Britain and the harbors of the Atlantic on the west.

Both business and pleasure now made travel very common, and a wide acquaintance with the world was not unusual. The Roman citizen of means and education made his tour of the Mediterranean much as the modern sight-seer does. Having arrived in the provincial town, however, he found no good hotels, and if he did not sleep in his own roomy coach or a tent carried by his servants, he was obliged to pass the night in untidy rooms over some shop the keeper of which entertained travelers. More often, however, the traveler of birth and means brought with him letters of introduction, which procured him entertainment at some wealthy private house.

For even in the provincial town the traveler found a group of successful men of business and public affairs who had gained wealth and had been given the rank of Roman knights. Among them now and again was one of especial prominence who had been given senatorial rank by the emperor. Below the senators and knights there was a free population of merchants, shopkeepers, artisans, and craftsmen. Following a custom as old as the end of the Athenian Empire, these men

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were organized into numerous guilds, societies, and clubs, each trade or calling by itself. These societies were in some ways much like our labor unions. They were chiefly intended for mutual benefit of the members in each occupation. Some of them also aided in social life, in the celebration of popular holidays, and the society treasury paid the funeral expenses when a member died, just as some societies among us do. As likely as not the richest and most influential man of the place was a freedman. There was in every large town a great number of freedmen, and they carried on an important share of the business of the Empire.

As the traveler walked about such a town he found everywhere impressive evidences of the generous interest of the citizens. There were fountains, theaters, music halls, baths, gymnasiums, and schools, erected by wealthy men and given to the community. The most famous among such men was Herodes Atticus, who built a magnificent concert hall for Athens. He has been called the "Andrew Carnegie" of his time. In the market place were statues of such donors, with inscriptions expressing the gratitude of the people. The boys and girls of these towns found open to them schools with teachers paid by the government, where all those ordinary branches of study which we have found in the Hellenistic Age were taught. The boy who turned to business could engage a stenographer to teach him shorthand, and the young man who wished higher instruction could still find university teachers at Alexandria and Athens, and also at a number of younger universities in both East and West, especially the new university established by Hadrian at Rome and called the Athenæum. Thus the cultivated traveler found men of education and literary culture wherever he went.

To such a traveler wandering in Greece and looking back some six hundred years to the Age of Pericles or the Persian wars of Athens, Greece seemed to belong to a distant and ancient world, of which he had read in the histories of Thucydides and Herodotus. Dreaming of those ancient days when Rome was a little market town on the Tiber, he might wander along the foot of the Acropolis and catch a vision of vanished

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greatness as it was in the days of Themistocles and Pericles. He could stroll through the porch of the Stoics and renew pleasant memories of his own student days when as a youth his father had permitted him to study there; or he might take a walk out to the Academy, where he had once listened to the teachings of Plato's successors.

At Delphi too he found a vivid story of the victories of Hellas in the days of her greatness—a story told in marble treasuries and votive monuments, the thanksgiving gifts of the Greeks to Apollo. As the Roman visitor stood there among the thickly clustered monuments, he noticed many an empty pedestal, and he recalled how the villas of his friends at home were now adorned with the statues which had once occupied those empty pedestals. The Greek cities which had brought forth such things were now poor and helpless, commercially and politically, in spite of the rich heritage of civilization which they had bequeathed to the Romans.

As the traveler passed eastward through the flourishing cities of Asia Minor and Syria, he might feel justifiable pride in what Roman rule was accomplishing. In the western half of the Fertile Crescent, especially on the east of the Jordan, where there had formerly been only a nomad wilderness, there were now prosperous towns, with long aqueducts, with baths, theaters, basilicas, and imposing public buildings, of which the ruins even at the present day are astonishing. All these towns were not only linked together by the fine roads we have mentioned, but they were likewise connected with Rome by other fine roads leading entirely across Asia Minor and the Balkan Peninsula.

Beyond the desert behind these towns lay the troublesome Parthian Empire. The educated Roman had read how over five hundred years earlier Xenophon, and later Alexander the Great, had passed by the heaps of ruins which were once Nineveh out yonder on the Tigris, and he knew from several Greek histories and the report of Trajan that the ruinous buildings of Babylon lay still farther down toward the sea on the Euphrates. Trajan's attempt to conquer all that coun-

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try having failed, the Roman traveler made no effort to extend his tour beyond the frontier out into these foreign lands.

But he could take a Roman galley at Antioch and cross over to Alexandria, where a still more ancient world awaited him. In the vast lighthouse, over four hundred years old and visible for hours before he reached the harbor, he recognized the model of the Roman lighthouses he had seen. Here our traveler found himself among a group of wealthy Greek and Roman tourists on the Nile. As they left the magnificent buildings of Hellenistic Alexandria their voyage up the river carried them at once into the midst of an earlier world—the earliest world of which they knew. All about them were buildings which were thousands of years old before Rome was founded. Like our modern fellow citizens touring the same land, many of them were merely curious idlers of the fashionable world. They berated the slow mails and languidly discussed the latest news from Rome while with indolent curiosity they visited the pyramids of Gizeh, lounged along the temple lakes and fed the sacred crocodiles, or spent a lazy afternoon carving their names on the colossal statues which overshadowed the plain of Egyptian Thebes, where Hadrian himself listened to the divine voice which issued from one of the statues every morning when the sun smote upon it. And here we still find their scribblings at the present day. But the thoughtful Roman, while he found not a little pleasure in the sights, took note also that this land of ancient wonders was filled as of old with flocks and herds and vast stretches of luxuriant grainfields, which made it the granary of Rome and an inexhaustible source of wealth for the emperor's private purse.

The Eastern Mediterranean then was regarded by the Romans as *their* ancient world, long possessed of its own ancient civilization, Greek and oriental. There the Roman traveler found Greek everywhere, and spoke it as he traveled. But when he turned away from the East and entered the Western Mediterranean, he found a much more modern world, with vast regions where civilization was a recent matter, just as it is in America. Thus throughout North Africa, west of

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Carthage, throughout Spain, Gaul, and Britain, the Romans had at first found only rough settlements, but no cities and no real architecture. Indeed, these western lands when first conquered by Rome had not much advanced beyond the neolithic stage, except here and there, where they had come into contact with the Greeks or Carthaginians.



FIG. 171. SCRIBBLINGS OF SICILIAN SCHOOLBOYS ON A BRICK IN THE DAYS OF THE ROMAN EMPIRE

In passing a brickyard these schoolboys of 1700 years ago amused themselves by scribbling school exercises in Greek on soft clay bricks before they were baked. At the top a little boy who was still making capitals carefully wrote the letter S (the Greek Σ) ten times, and under it the similar letter K, also ten times. Then he wrote "turtle" (ΧΕΛΩΝΑ), "mill" (ΜΤΑΑ), and "pail" (ΚΑΔΟΣ), all in capitals. An older boy then pushed the little chap aside and proudly demonstrated his superiority by writing in two lines an exercise in tongue gymnastics (like "Peter Piper picked a peck of pickled peppers," etc.) which in our letters is as follows:

Nai neai nea naia neoi temon, hōs
neoi ha naus

This means: "Boys cut new planks for a new ship, that the ship might float." A third boy then added two lines at the bottom. The brick illustrates the spread of Greek as well as provincial education under the Roman Empire

Seneca, one of the wisest of the Romans, said, "Wherever a Roman has conquered, there he also lives." This was especially true of the West. Roman merchants and Roman officials were everywhere, and many of the cities were Roman colonies. The language of civilized intercourse in all the West was Latin, the language of Rome, whereas east of Sicily the traveler heard only Greek. In this age western Europe had for the first time been building cities; but it was under the guidance of Roman architects, and their buildings looked like those at Rome. In North Africa between the desert

and the sea, west of Carthage, the ruins of whole cities with

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magnificent public buildings still survive to show us how Roman civilization reclaimed regions little better than barbarous before the Roman conquest. Similar imposing remains survive in western Europe, especially southern France. We can still visit and study massive bridges, spacious theaters, imposing public monuments, sumptuous villas, and luxurious public baths—a line of ruins stretching from Britain through southern France and Germany to the northern Balkans.

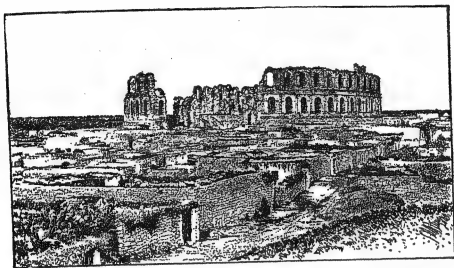


FIG. 172. ROMAN AMPHITHEATER SEEN ACROSS THE HUTS OF A MODERN NORTH AFRICAN VILLAGE

The town which once supported a public place of amusement like this has given way to a squalid village, and the whole region west of Carthage has to a large extent relapsed into barbarism

Just as the communities of Roman subjects once girdled the Mediterranean, so the surviving monuments and buildings which they used still envelop the great sea from Britain south-eastward to Jerusalem, and from Jerusalem westward to Morocco. They reveal to us the fact that as a result of all the ages of human development which we have studied, the whole Mediterranean world, West as well as East, had now reached a high civilization. Such was the picture which the Roman traveler gained of that great world which his countrymen ruled: in the center the vast midland sea, and around it a fringe of civilized countries surrounded and protected by the

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encircling line of legions. They too stretched from Britain to Jerusalem, and from Jerusalem to Morocco, like a dike restraining the stormy sea of barbarians outside, which would otherwise have poured in and overwhelmed the results of centuries of civilized development. Meantime we must return from the provinces to the great controlling center of this Med-

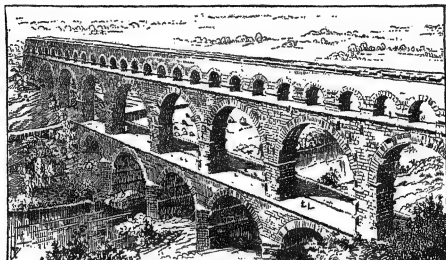


FIG. 173. ROMAN BRIDGE AND AQUEDUCT NEAR NÎMES, FRANCE

This structure was built by the Romans about the year A.D. 20 to supply the Roman colony of Nemausus (now called Nîmes), in southern France, with water from two excellent springs 25 miles distant. It is nearly 900 feet long and 160 feet high, and carried the water over the valley of the river Gard. The channel for the water is at the very top, and one can still walk through it. The miles of aqueduct on either side of this bridge and leading to it have almost disappeared

iterranean world, to Rome itself, and endeavor to learn what had been the course of civilization there since the Augustan Age.

The Civilization of the Early Roman Empire: Rome

The visitor in Rome at the close of the reign of Hadrian found it the most magnificent monumental city in the world of that day. It had by that time quite surpassed Alexandria in size and in the number and splendor of its public buildings. At the eastern end of the Forum, on ground once occupied by Nero's Golden House, Vespasian erected a vast am-

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phitheater (now known as the Colosseum) for gladiatorial combats. It was completed and dedicated by his son Titus, who arranged, for the forty-five thousand spectators whom it held, a series of bloody spectacles lasting a hundred days. Although now much damaged, it still stands as one of the greatest buildings in the world. Vespasian completed also the rebuilding of the city, after the great fire of Nero's reign.

It was especially in and alongside the old Forum that the grandest buildings of the Empire thus far had grown up. The business of the great world capital led Vespasian and Nerva to erect two more magnificent forums. These two, with the two of Cæsar and Augustus, formed a group of four new forums along the north side of the old Forum. At the northwest end of this group of four Trajan built another, that is, a fifth new forum, which surpassed in magnificence anything which the Mediterranean world had ever seen before. On one side was a vast new business basilica, and beyond this rose a mighty column, richly carved with scenes picturing Trajan's brilliant campaigns. On each side of the column was a library building, one for Greek and one for Latin literature. The column still stands beside one of the busy streets of modern Rome, but little of the other magnificent buildings has survived.

In the buildings of Trajan and Hadrian the architecture of Rome reached its highest level both of splendor and of beauty, and also of workmanship. Sometime in the Hellenistic Age architects had begun to employ increasing quantities of cement concrete, though it is still uncertain where or by whom the hardening properties of cement were discovered. Under Hadrian and his successors the Roman builders completely mastered the art of making colossal casts of concrete. The domed roof of Hadrian's Pantheon, made of concrete, is over a hundred and forty feet across. The Romans, therefore, eighteen hundred years ago were employing concrete on a scale which we have only recently learned to imitate, and after all this lapse of time the roof of the Pantheon seems to be as safe and stanch as it was when Hadrian's architects first knocked away the posts which supported the wooden form for the cast. The Mausoleum of Hadrian is the greatest of all Roman

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tombs and for several generations was the burial-place of the emperors. It survives as one of the finest buildings of Rome.

The *relief* sculpture adorning all these monuments reveals Roman art at its best. The reliefs covering Trajan's column are a wonderful picture book of his campaigns, displaying

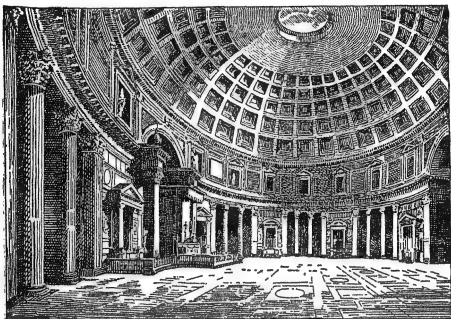


FIG. 174. INTERIOR VIEW OF THE DOME OF THE PANTHEON, BUILT AT ROME BY AGRIPPA AND HADRIAN

The first building on this spot was erected by Agrippa, Augustus' great minister, but it was completely rebuilt, as we see it here, by Hadrian. The circular hole in the ceiling is 30 feet across; it is 142 feet above the pavement, and the diameter of the huge dome is also 142 feet. This is the only ancient building in Rome which is still standing with walls and roof in a perfectly preserved state. It is thus a remarkable example of Roman skill in the use of concrete. At the same time it is one of the most beautiful and impressive domed interiors ever designed

greater power of invention than Roman art ever showed elsewhere. Roman appreciation of Greek sculpture continued to create a demand for copies of the masterpieces of the Greek sculptors. Many such famous Greek works, which perished long ago, are now known to us only in the form of surviving copies made by the Roman sculptors and discovered in modern excavations in Italy. Portrait sculpture attained a high level of excellence during the second century A.D. Indeed,

the portrait busts of leading Romans of the day are among the finest works of the kind ever wrought, and give us a lively notion of how the people of the time looked.

Not much painting has survived from the reigns of the emperors following Vespasian. But European museums possess many fine mosaics of the period, which were evidently copied for the most part from paintings. A number of beautiful mosaics, and some few fragments of paintings, come from the ruins of the magnificent villa of Hadrian at Tivoli. Portrait painting seems to have flourished, and the hack portrait painter at the street corner, who did your portrait quickly for you on a tablet of wood, was almost as common as our own portrait photographer. A young soldier in the Roman army, proud of his new uniform, would for a few cents have his portrait painted to send home in a letter to his parents, and perfectly preserved examples of such work have been excavated in Egypt.

There was now a larger educated public at Rome than ever before, and the splendid libraries maintained by the state were open to all. Authors and literary men were also liberally supported by the emperors. Nevertheless, even under these favorable circumstances not a single genius of great creative imagination arose. This was probably mostly due to the contemporary training in rhetoric which emphasized style and smartness of phrase rather than originality and sincerity. Real progress in literature therefore declined. The leadership in learning, held for a brief time by Rome in the Augustan Age, had now returned to Athens, where the emperors had endowed the four schools of philosophy as a government university. Nevertheless, Rome was still a great influence in literature; the leading literary men of the Empire desired to play a part there, and when a philosopher or teacher of rhetoric published his lectures in book form, he was proud to place under the title the words, "delivered at Rome."

While poetry had declined, prose writers were still productive. Nero's able Minister, Seneca, wrote very attractive essays and letters on personal character and conduct. They show so fine an appreciation of the noblest human traits that many

have thought he had secretly adopted Christianity. His style became so influential that it displaced that of Cicero for a long time. The emperors during the greater part of the first century had rigorously censored all writings concerning events in the past, as they thought it might effect the attitude of the people toward the imperial government. This put an end for a time to the writing of history. It was, therefore, not until after the death of Domitian and the rise of a new freedom of speech under Nerva and Trajan that Tacitus was able to produce a frank history of the Empire from the death of Augustus to the death of Domitian (from A.D. 14 down to A.D. 96). Although Tacitus allowed his personal prejudices to sway him, so that he has given us a very dark picture of the Julian emperors, his tremendous power as a writer resulted in the greatest history ever put together by a Roman. Among his other writings was a brief account of Germany, which furnishes us our first full glimpse into the life of the peoples of northern Europe. The letters which at this time passed between the younger Pliny and the Emperor Trajan are among the most interesting literature of the ancient world. They remind us of the letters of Hammurabi of Babylon some twenty-two hundred years earlier.

With these writers in Latin we should also associate several immortal works by Greeks of the same age, though they did not live at Rome. In the little village of Chæronea in Bœotia, where Philip of Macedon crushed the Greeks, Plutarch at this time wrote his remarkable series of lives of the greatest men of Greece and Rome, placing them in pairs, a Greek and a Roman together, and comparing them. Although they contain much that belongs in the world of romance, they form an imperishable gallery of heroes which has held the interest and the admiration of the world for eighteen centuries. At the same time another Greek, named Arrian, who was serving as a Roman governor in Asia Minor, collected the surviving accounts of the life of Alexander the Great. He called his book the *Anabasis* of Alexander, after the *Anabasis* of Xenophon, whom he was imitating in accordance with the imitative spirit of the age. Arrian was only a passable writer of

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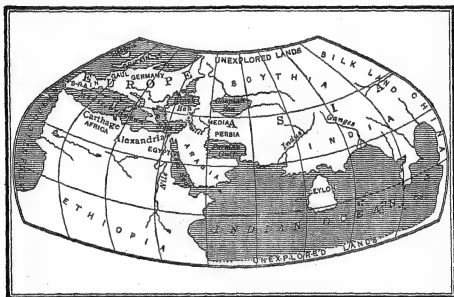
prose and certainly not a great historian, but without his compilation we would know very little about Alexander the Great. A huge guidebook through Greece, telling the reader all about the buildings and monuments still standing at that time in the leading Greek towns, like Athens, Delphi, and Olympia, was now put together by Pausanias. It furnishes us an immortal picture book in words of ancient Greece in all its splendor of statues and temples, theaters and public buildings.

In science the Romans continued to be collectors of the knowledge gained by the Greeks. During a long and successful official career the elder Pliny devoted himself with incredible industry to scientific studies. He made a vast collection of the facts then known in science as found in books, chiefly Greek. He put them all together in a huge book which he called "Natural History"—really an encyclopedia. He was so deeply interested in science that he lost his life in the great eruption of Vesuvius, as he was trying both to study the tremendous event at short range and (as admiral of the fleet) to save the fleeing people of Pompeii. But Pliny's "Natural History" did not contain any new facts of importance discovered by the author himself, and it was marred by many errors in matters which Pliny misunderstood. Nevertheless, for hundreds of years, until the revival of science in modern times, Pliny's work was, next to Aristotle, the standard authority referred to by all educated Europeans. Thus men fell into an indolent attitude of mind and were satisfied merely to learn what earlier discoverers had found out. This attitude never would have led to the discovery of the size of the earth as determined by Eratosthenes, or in modern times to X-ray photographs or wireless telegraphy.

A great astronomer and geographer of Alexandria named Ptolemy, who flourished under Hadrian and the Antonines, was the last of the famous scientists of the ancient world. He wrote among other works a handbook on astronomy, for the most part a compilation from the works of earlier astronomers. In it he unfortunately adopted the conclusion that the sun revolved around the earth as a center. His book became a

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standard work, and hence this mistaken view of the solar system, called the Ptolemaic system, was everywhere accepted by the later world. It was not until four hundred years ago that the real truth, already long before discovered by the Greek astronomer Aristarchus of Samos, was rediscovered by the Polish astronomer Copernicus. It was a further sign of the decline of science that Ptolemy even wrote a book on Babylonian astrology. Knowledge of the spherical form of the



MAP OF THE WORLD ACCORDING TO THE ASTRONOMER AND GEOGRAPHER
PTOLEMY (SECOND CENTURY A.D.)

earth as shown by Ptolemy and earlier Greek astronomers reached the travelers and navigators of later Europe, and finally led Columbus to undertake the voyage to India and the East *westward*—the voyage which resulted in the discovery of America.

The position of educated Greeks at Rome was very different from what it had been under the Republic, when such men were slaves or teachers in private households. Now they were holding important positions in the government or as teachers and professors paid by the government. The city was no longer Roman or Italian; it had become Mediterranean, and many worthy families from the provinces, settling in Rome, had greatly bettered the decadent society of the city. Lead-

THE CIVILIZATION: ROME

ing men whose homes in youth had looked out from the hills of Spain upon the Atlantic mingled at Rome with influential citizens who had been born within a stone's throw of the Euphrates. Men of all the world elbowed each other and talked business in the banks and countinghouses of the magnificent new forums; they filled the public offices and administrative departments of the government and discussed the hand-copied daily paper published by the state; they sat in the libraries and lecture halls of the university and they crowded the lounging places of the public baths and the vast amphitheater. They largely made up the brilliant social life which ebbed and flowed through the streets, as the wealthy and the wise gathered at sumptuous dinners and convivial winter evenings in the city itself, or indolently killed time loafing about the statue-filled gardens and magnificent country villas overlooking the Bay of Naples, where the wealthy Romans spent their summer leisure. We call such all-inclusive, widely representative life "cosmopolitan"—a word of Greek origin meaning "world-cityish."

This converging of all the world at Rome was evident in the luxuries now enjoyed by the rich. The outward life, houses, and costumes of the wealthy were, on the whole, not much changed from that which we found toward the close of the Republic. Luxury and display had somewhat increased, and in this direction oriental rarities now played a noticeable part. Roman ladies were decked with diamonds, pearls, and rubies from India, and they robed themselves in shining silks from China. The tables of the rich were bright with peaches and apricots, now appearing for the first time in the Roman world. Roman cooks learned to prepare rice, formerly a delicacy required only by the sick. Horace had amusingly pictured the distress of a miserly Roman when he learned the price of a dish of rice prescribed by his physician. Instead of sweetening their dishes with honey as formerly, Roman households began to find a new product in the market-place known as "sakari"; for so the report of a venturesome oriental sailor of the first century A.D. calls the sirup of sugar cane which he brought by water from India into the Mediterranean for the first time. It gave the Romans their word for sugar, *sac-*

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charum, and is the earliest mention of sugar in history. These new things from the Orient were beginning to appear in Roman life just as the potatoes, tobacco, and Indian corn of America found their way into Europe after the voyages of Columbus had disclosed a new western world.

Popularity of Oriental Religions and the Spread of Early Christianity

The life of the Orient was at the same time continuing to bring into the Mediterranean other things less easily traced than rice or sugar, but much more important in their influence on the Roman world. The intellectual life of the Empire was steadily declining, as we have seen indicated by literature and science. Philosophy was no longer occupied with new thoughts and the discovery of new truths. Such philosophy had given way to the semireligious systems of living and ideas of right conduct taught by the Stoics and Epicureans. Thoughtful Romans read Greek philosophy of this kind in the charming treatises of Cicero or the discussions of Seneca. Such readers had given up the old Roman gods and accepted these philosophical precepts of daily conduct as their religion. But this teaching was only for the highly educated and the intellectual class.

Nevertheless, even men of culture sometimes followed the multitude and yielded to the fascination of the mysterious religions coming in from the East. Back in Augustus' time the Roman poet Tibullus, absent on a military campaign which sickness had interrupted, wrote to his fiancée Delia in Rome: "What does your Isis for me now, Delia? What avail me those brazen *sistra*¹ of hers, so often shaken by your hand? . . . Now, now, goddess, help me; for it is proved by many a picture in thy temples that man may be healed by thee." Tibullus and his fiancée belonged to the most cultivated class, but they had taken refuge in the faith of the Egyptian Isis. When Hadrian's handsome young Greek friend Antinoüs was drowned in the Nile, the emperor erected an obelisk at Rome in his memory, with a hieroglyphic inscription announcing the beautiful youth's divinity and his union with Osiris. At-

¹ Egyptian musical instruments played by shaking in the hand.

ORIENTAL RELIGIONS: CHRISTIANITY

tached to Hadrian's villa at Tivoli was an Egyptian garden, sacred chiefly to Isis and Osiris and filled with their monuments. Plutarch wrote an essay on Isis and Osiris which he dedicated to a priestess of Isis at Delphi. Since the days of the early empire, multitudes had taken up this Egyptian faith, and temples of Isis were to be found in all the larger cities. Today tiny statuettes and other symbols of the Egyptian goddess are found even along the Seine, the Rhine, and the Danube.

The Great Mother goddess of Asia Minor, with her consort Attis, also gained the devotion of many Romans. In the army the Persian Mithras, a god of light, was a great favorite, and many a legion had its underground chapel where its members celebrated his triumph. All these faiths had their "mysteries," consisting chiefly of dramatic presentations of the career of the god, especially his submission to death, his triumph over it, and his ascent to everlasting life. It was believed that to witness these things and to undergo certain holy ceremonies of initiation would bring to all initiates deliverance from evil, the power to share in the endless life of the god and to dwell with him forever.

The old Roman faith had little to do with conduct and held out to the worshiper no such hopes of future blessedness. Throughout the great Roman world men were longing for some assurance regarding the life beyond the grave, and in the midst of the trials and burdens of this life they wistfully sought the support and strength of a divine protector. Little wonder that the multitudes were irresistibly attracted by the comforting assurances of these oriental faiths and the blessed future insured by their "mysteries." At the same time it was believed possible to learn the future of every individual by the use of Babylonian astrology. Even the astronomer Ptolemy wrote a book on it. The Orientals who practiced it were called Chaldeans, or Magi (whence our words "magic" and "magician"), and everyone consulted them.

The Jews too, now that their temple in Jerusalem had been destroyed by the Romans, were to be found in increasing numbers in all the larger cities. Strabo, the geographer, said of them: "This people has already made its way into every

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city, and it would be hard to find a place in the habitable world which has not admitted this race and been dominated by it." The Roman world was becoming accustomed to their synagogues; but the Jews refused to acknowledge any god besides their own, and their exclusiveness brought them disfavor and trouble with the government.



FIG. 175. CERTIFICATE SHOWING THAT A ROMAN CITIZEN HAD SACRIFICED TO THE EMPEROR AS A GOD*

Among all these faiths of the East, the common people were more and more inclining toward one whose teachers told how their Master, Jesus, a Hebrew, was born in Palestine, the land of the Jews, in the days of Augustus. Everywhere they told the people of his vision of human brotherhood and of divine fatherhood, surpassing even that which the Hebrew prophets had once discerned. This faith he had preached for a few years in the Aramaic language of his countrymen, till he incurred their hatred; and in the reign of Tiberius they had brought charges against him, accusing him of political conspiracy, before the Roman governor, Pontius Pilate, who had let him be put to death.

A Jewish tentmaker of Tarsus named Paul, a man of passionate eloquence and unquenchable love for his Master, passed far and wide through the cities of Asia Minor and Greece, and even to Rome, proclaiming his Master's teaching. He left behind him a line of devoted communities stretching from Palestine to Rome. Certain letters which he wrote in Greek to his followers were circulating widely among them and were read with eagerness. At the same time a narrative of the Master's life had also been written in Aramaic. This perished, but Greek accounts drawing upon

the Aramaic narrative also appeared, and were now widely read by the common people. There were finally *four* leading biographies of Jesus in Greek, which came to be regarded as authoritative, and these we call the Four Gospels. Along with the letters of Paul and some other writings they were later put together in a Greek book now known in the English translation as the New Testament.

The other oriental faiths, in spite of their attractiveness, could not offer to their followers the consolation and fellowship of a life so exalted and beautiful, so full of brotherly appeal and human sympathy as that of the new Hebrew Teacher. In the hearts of the toiling millions of the Roman Empire his simple summons, "Come unto me all ye that labor and are heavy laden," proved a mightier power than all the edicts of the Roman emperors. The slave and the freedman, the artisan and the craftsman, the humble and the despised in the huge barracks which sheltered the poor in Rome, listened to this new "mystery" from the East, as they thought it to be; and, as time passed, multitudes responded and found joy in the hopes which it awakened. In the second century of peace it was rapidly outstripping the other religions of the Roman Empire.

The officers of government often found these early converts not only refusing to sacrifice to the emperor as a god, but also openly prophesying the downfall of the Roman state. The early Christians were therefore more than once called

* Excavators in the ruins of Egyptian villages have discovered over a score of such certificates, each written on a strip of papyrus. This specimen states that a citizen named Aurelius Horion, living in the village of Theadelphia in Egypt, appeared before a government commission and not only affirmed that he had always been faithful in the worship of the gods, but also, in the presence of the commission and of witnesses, offered sacrifice (a slaughtered animal), presented a drink offering, and likewise consumed a portion of these offerings. In the middle we see the heavy black signature of the presiding official, and at the bottom in four lines the date, corresponding to our A.D. 250. Every Roman citizen at this time, no matter what his religion might be, was obliged to possess such a certificate and to show it on demand. It was called a *libellus*, and the owner of it was called a *libellaticus*. (Compare our word "libel.") A Christian who would resort to such a means of escaping persecution by the government was greatly despised by the faithful, who refused to comply.

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upon to endure cruel persecution. Their religion seemed incompatible with good citizenship, since it forbade them to show the usual respect for the emperor and the government.

Nevertheless, their numbers steadily grew, and each new Christian group or community organized itself into an assembly of members called an *ecclesia*, or, as we say, a church. *Ecclesia* was the old Greek word for Assembly of the People, and in these new assemblies, or churches, men of ability were now beginning to find those opportunities for leadership and power which the decline of citizenship in the old city republics no longer offered. The leaders of the *churches* were soon to be the strong men of the people and to play a *political* as well as a *religious* rôle.

The End of the Second Century of Peace

In spite of outward prosperity, especially suggested by the magnificent buildings of the Empire, Mediterranean civilization was declining in the second century of peace. The decline became noticeable in the reign of Hadrian. The just and kindly Antoninus, who followed Hadrian in A.D. 138, was called by the Romans "the Pious," but he showed hardly enough energy to maintain the foreign prestige of the Empire, even though he strengthened the northern frontier walls. His successor, the noble Marcus Aurelius, therefore had to face a very serious situation (A.D. 161). The Parthians, encouraged by the easy-going reign of Antoninus Pius, made trouble on the eastern frontier, and Marcus Aurelius was obliged to fight them in a four years' war before the frontier was safe again.

When the Roman troops returned from this war, they brought back with them a terrible plague which destroyed multitudes of men at the very moment when the Empire most needed them. For at this juncture the barbarian hordes in the German north broke through the frontier defenses, and for the first time in two centuries they poured down into Italy (A.D. 167). The two centuries of peace were ended. At the same time the finances of the Empire were so low that the emperor was obliged to sell the crown jewels to raise the money necessary for equipping and supporting the army. With

little intermission, until his death in A.D. 180 Marcus Aurelius maintained the struggle against the Germans in the region later forming Bohemia. Indeed, death overtook him while still engaged in the war. But in spite of victory over the barbarians, Marcus Aurelius was unable to sweep them entirely out of the northern regions of the Empire. He finally took the very dangerous step of allowing some of them to remain as farmer colonists on lands assigned to them inside of the frontier. This policy later resulted in very serious consequences to the Empire.

Nevertheless, the ability and enlightened statesmanship of Marcus Aurelius are undoubted. Indeed, they were equaled only by the purity and beauty of his personal life. He regarded his exalted office as a sacred trust to which he must be true, in spite of the fact that he would have greatly preferred to devote himself to reading, study, and philosophy, which he deeply loved. Amid the growing anxieties of his position, even as he sat in his tent and guided the operations of the legions among the forests of Bohemia in the heart of the barbarous North, he found time to record his thoughts and leave to the world a little volume of meditations written in Greek. As the aspirations of a gentle and chivalrous heart toward pure and noble living, these meditations are among the most precious legacies of the past. Marcus Aurelius was the last of a high-minded succession, the finest spirit among all the Roman emperors. There was never another like him on the imperial throne. But no ruler, however pure and unselfish his purposes, could stop the processes of decline going on in the midst of the great Roman world. Following the two centuries of peace, therefore, was to come a fearful century of revolution, civil war, and anarchy, from which a very different Roman world was to emerge.

CHAPTER XXIX

A CENTURY OF REVOLUTION AND THE DIVISION OF THE EMPIRE

Internal Decline of the Roman Empire

WE HAVE seen good government, fine buildings, education, and other evidences of civilization more widespread in the second century of peace than ever before. Nevertheless, the great Empire which we have been studying, although in a condition seemingly so favorable, was suffering from an inner decay whose symptoms, at first hidden, were fast becoming more and more evident. In the first place, the decline of farming, so noticeable before the fall of the Republic, had gone steadily on.

In spite of the heavy taxes imposed upon it, land had continued to pass over into the hands of the rich and powerful. The oriental system of confining land ownership to large domains held by the state and a few individuals had also a strong influence. From Asia Minor, where it was widespread under the Persians, this system had passed to Greece. The Romans had found it also in Africa, the province behind Carthage. Already in Nero's time half of this province was made up of six domains, held by only six great landlords. Such a great estate was called a *villa*; and the system of villa estates, having destroyed the small farmers of Italy, was likewise destroying them in the provinces also. Villas now covered not only Italy but also Gaul, Britain, Spain, and other leading provinces. It is probable that soil impoverishment also contributed to the widespread agricultural decline.

Unable to compete with the great villas, and finding the burden of taxes unbearable, most of the small farmers gave up the struggle. A man in this plight would often enter upon an arrangement which made him the *colonus* of some wealthy villa owner. By this arrangement the farmer and his descendants were forever bound by law to the land which they worked, and they passed with it from owner to owner when it changed hands. While not actually slaves, they were not free to leave or go where they pleased; and without any prospect of bettering themselves, or any opportunity for their children

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ever to possess their own lands, these men lost all energy and independence and were very different from the hardy farmers of early Rome. As we shall see, many northern barbarians also became *coloni* within the frontiers of the Empire.

The great villas once worked by slaves were now cultivated chiefly by these *coloni*. With the end of the long wars the captives who had been sold as slaves were no longer obtainable, and slaves had steadily diminished in numbers. Their condition had also much improved, and the law now protected them from the worst forms of cruelty once inflicted upon them. We have already noticed the growing practice of freeing slaves, which made freedmen so common throughout the Empire that they were playing an important part in manufactures and business.

Multitudes of the country people, unwilling to become *coloni*, forsook their fields and turned to the city for relief. Many did this because neglect of fertilization and long-continued cultivation had exhausted their land and it would no longer produce crops. Great stretches of unworked and weed-grown fields were no uncommon sight. As a result the amount of land under cultivation continually decreased, and the ancient world was no longer raising enough food to feed itself properly. The scarcity was felt most severely in the larger centers of population like Rome, where prices had rapidly gone up.

Offers by the emperor to give land to anyone who would undertake to cultivate it failed to increase the amount of land under the plow. Even under the wisest emperors the government was therefore entirely unable to restore to the country districts the hardy yeomen, the brave and independent farmers, who had once formed the basis of Italian prosperity—the men who, in the ranks of the legion, had laid the foundation of Roman power. The destruction of the small farmers and the inability of Rome to restore them formed the leading cause among a whole group of causes which brought about the decline and fall of this great empire.

The country people who moved to Rome were only bring-

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ing about their own extermination as a class. The large families which country life favors were no longer reared, the number of marriages decreased, and the population of the Empire shrank. Debased by the life of the city, the former sturdy yeoman lost his independence in an eager scramble for a place in the waiting line of city poor, to whom the government distributed free grain, wine, and meat. The time which should have been spent in breadwinning was worse than wasted among the cheering multitudes at the chariot races, bloody games, and barbarous spectacles. Notwithstanding the fine families who moved to Rome from the provinces under the liberal emperors of the second century A.D., the city became a great hive of shiftless population supported by the state with money which the struggling agriculturist was taxed to provide. The same situation was in the main to be found in all the leading cities.

In spite of outward splendor, therefore, these cities too were declining. They had now learned to depend upon Rome to care for them even in their own local affairs, and their citizens had rapidly lost all sense of public responsibility. The helpful rivalry between neighboring city-states too had long ago ceased. Everywhere the leading men of the cities were indifferently turning away from public life. Moreover, Rome was beginning to lay financial obligations upon the leading men of such cities, and it was becoming increasingly difficult to find men willing to assume these burdens. Responsible citizenship, which does so much to develop the best among the citizens in any community and which had earlier so sadly declined in Greece, was passing away, never to reappear in the ancient world.

At the same time the financial and business life of the cities was also declining. The country communities no longer possessed a numerous purchasing population. Hence the country market for the goods manufactured in the cities was so seriously reduced that city industries could no longer dispose of their products. They rapidly declined. The industrial classes were thrown out of work and went to increase the multitudes

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of the city poor. City business was also much hurt by a serious lack of precious metals for coining money.

Many of the old silver and gold mines around the Mediterranean now seem to have been worked out. Wear in circulation, loss by shipwreck, private hoards, and considerable sums which went to pay for goods in India and China, or as gifts to the German barbarians—all these causes aided in diminishing the supply of the precious metals. The government was therefore unable to secure enough to coin the money necessary for the transaction of business. The emperors were obliged to begin mixing in an increasing amount of less valuable metals and coining this cheaper alloy. The Roman coin collections in the European museums show us that the coins of Augustus were pure, while those of Marcus Aurelius contain twenty-five per cent of alloy. Two generations after Marcus Aurelius there was only five per cent of silver in a government coin. A *denarius*, the common small coin, worth nearly twenty cents under Augustus, a century after the death of Marcus Aurelius was worth only half a cent.

Even Marcus Aurelius had trouble in finding enough money to pay his army. As soon as this difficulty became serious it paralyzed the government and demoralized the army. It was impossible to maintain a paid army without money. As it became quite impossible to collect taxes in money, the government was obliged to accept grain and produce as payment of taxes, and great granaries and storehouses began to take the place of the treasury as in ancient Egypt. Here and there the army was paid in grain. On the frontiers, for lack of other pay the troops were assigned lands, which of course did them no good unless they could cultivate them. Then they were allowed to marry and to live with their families in little huts on their lands near the frontier. Called out only occasionally for drill or to repel a barbarian raid, they soon lost all discipline and became merely feeble militia, called by the Roman government "frontiersmen" (*limitanei*).

Even under Marcus Aurelius, a governor of a province had started a serious rebellion. Hence the emperor was now

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obliged to keep a standing army in Italy. These legions had become much smaller, and they were made up increasingly of barbarians, especially Germans and the uncivilized natives of the northern Balkans, among whom the Illyrians took the lead. The Roman-born soldier was now a rarity in the ranks, and it soon became necessary to allow the barbarians to fight in their own massed formations, to which they were accustomed. The discipline of the legion, and the legion itself, disappeared, and with it the superior military power of Rome was gone. The native ferocity and reckless bravery of uncivilized hordes, before which the unmilitary Roman townsmen trembled, were now the power upon which the Empire relied for its protection.

This degeneration of the army was much hastened by a serious imperfection in the organization of the Roman state, left there by Augustus. This was the lack of a legal and long-practiced method of choosing a new emperor and transferring the power from one emperor to the next and thus maintaining from reign to reign without a break the supreme authority in the Roman state. The troops found that they could make a new emperor whenever the old emperor's death gave them an opportunity. For an emperor so made they had very little respect and, if he attempted to enforce discipline among them, they put him out of the way and appointed another. Rude and barbarous mercenary soldiery thus became the highest authority in the state.

Finally, the spread of civilization to the provinces had made them feel that they were the equals of Rome and Italy itself. Even under the Republic there was much foreign blood in the peninsula. Horace himself had been the son of a freedman. Italy was now largely foreign in population. Trajan and Hadrian had been Spaniards, and more than one province furnished the Empire with its ruler. When, in A.D. 212 citizenship was granted to all free men within the Empire, in whatever province they lived, the leveling of distinctions gave the provinces more and more opportunity to compete for leadership.

A CENTURY OF REVOLUTION

A Century of Revolution

These forces of decline were swiftly bringing on a century of revolution which was to shipwreck the civilization of the early world. This fatal century began with the death of Marcus Aurelius in A.D. 180. The assassination of his unworthy son Commodus, who reminds us of Nero, gave the opportunity for a struggle among a group of military usurpers. From this struggle a rough but successful soldier named Septimius Severus emerged triumphant (A.D. 193-211). It was he who found himself obliged to settle the frontier troops on their own lands with resulting demoralization of the army. He systematically filled the highest posts in the government with military leaders of low origin. Thus, both in the army and in the government, the ignorant and often foreign masses were gaining control. Nevertheless, the energy of Severus was such that he led his forces with success against the Parthians in the East, and even recovered Mesopotamia. But the arch which he erected to commemorate his victories, and which still stands in the Forum at Rome, reveals in its barbarous sculptures the fearful decline of culture in Italy. The Roman artists who wrought these rude reliefs were the grandsons of the men who had so skillfully sculptured the column of Trajan.

The family of Septimius Severus maintained itself for a time, and it was his son Caracalla who conferred citizenship on all free men in the Empire in A.D. 212. But when the line of Severus ended (A.D. 235), the storm broke. The barbaric troops in one province after another set up their puppet emperors to fight among themselves for the throne of the Mediterranean world. The proclamation of a new emperor would be followed again and again by news of his assassination. From the leaders of the barbaric soldier class, after the death of Commodus, the Roman Empire received eighty rulers in ninety years. One of these rulers of a day, in A.D. 248, went through the mockery of celebrating the thousand years' jubilee of the traditional founding of Rome.

Most of these so-called emperors were not unlike the revo-

REVOLUTION AND DIVISION OF THE EMPIRE

lutionary bandits who sometimes proclaim themselves presidents of the small republics of Central America. For fifty years there was no public order, as the plundering troops tossed the

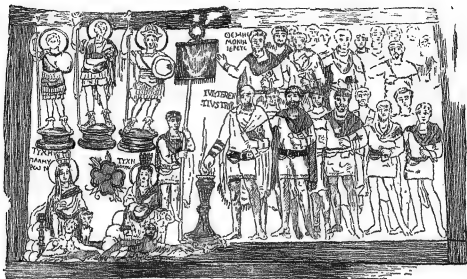


FIG. 176. ROMAN GARRISON OF SEPTIMIUS SEVERUS WORSHIPPING ORIENTAL GODS ON THE EUPHRATES FRONTIER

This is the easternmost representation of Roman soldiers ever discovered. At the left, standing on three pedestals and leaning on their spears, are the three gods of Palmyra; below them are two seated goddesses of Fortune. Their names are written over them in Greek, and we learn that the one at the left is "Fortuna of Palmyra" and the other is "Fortuna of Dura," the name of the city where this garrison was posted. Near the middle, before a small burning altar, stands the Roman commander, whose name is written beside him, "Julius Terentius, the Tribune." He is dropping incense on the fire. Before him is posted the standard-bearer, holding the red standard of a Roman army, while behind the commander is a group of the garrison legionaries who have been stationed here by Septimius Severus. It was natural that these soldiers should want to gain the favor of the local goddess of Fortune, and also of the divinities of Palmyra, which was about one hundred and forty miles away. It is important to note that these five oriental divinities all have the golden disk, or aureole, behind their heads to indicate their divine character. The scene is a wall painting discovered by the Oriental Institute Expedition of The University of Chicago in the fortress of Dura, on the middle Euphrates, about forty miles outside of the frontier later established by Diocletian. (Drawing by courtesy of Franz Cumont)

scepter of Rome from one soldier-emperor to another. Life and property were nowhere safe; turbulence, robbery, and murder were everywhere. The tumult and fighting between

A CENTURY OF REVOLUTION

rival emperors hastened the ruin of all business; and, as the affairs of the nation passed from bad to worse, national bankruptcy ensued. In this tempest of anarchy during the third century A.D. the civilization of the ancient world suffered final collapse. The supremacy of mind and of scientific knowledge won by the Greeks in the third century B.C. yielded to the reign of ignorance and superstition in these social disasters of the third century A.D.

As the Roman army weakened, the northern barbarians were quick to perceive the helplessness of the Empire. In the East the Goths, one of the strongest German tribes, took to the water, and their fleet passed out of the Black Sea into the Mediterranean. While they devastated the coast cities far and wide, other bands pushed down through the Balkan Peninsula and laid waste Greece as far as the Peloponnese. Even Athens was plundered. The barbarians penetrated far into Italy; in the West they overran Gaul and Spain, and some of them even crossed to Africa. In Gaul they burned city after city, and their leaders stood by and laughed in exultation as they saw the flames devouring the beautiful buildings of these Roman towns.

When the people of the plundered lands saw that the Empire could no longer defend them, they organized for their own defense. In this way Gaul, for example, became an independent nation under its own rulers for years in this terrible century. Its people repulsed the barbarians and slowly rebuilt their burned cities. They dared not spread out the city, as before; but, grouping all the buildings close together, they built the town compactly and surrounded it by a massive wall, made largely of blackened blocks of stone taken from the ruined buildings burned by the barbarians. In no less than sixty cities of France today sections of these heavy walls, when taken down to make room for modern improvements, are found to contain these smoke-blackened blocks. Far outside the city walls containing these blocks, excavation has revealed to us the foundations of the splendid Roman structures from which the blocks came and which formed the once larger city destroyed by the barbarians.

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At the same time a new danger had arisen in the East. A revival of patriotism among the old Persian population had resulted in a vigorous restoration of their national life. Their leaders, a family called Sassanians (or Sassanids), overthrew the Parthians (A.D. 226) and furnished a new line of enlight-

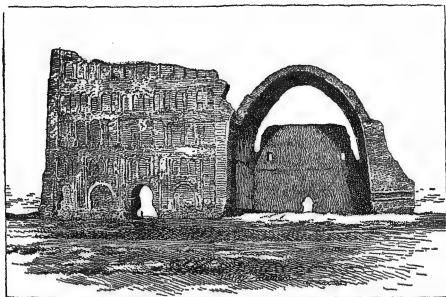


FIG. 177. RUINS OF THE ROYAL PALACE AT CTESIPHON, ON THE TIGRIS, ONCE THE CAPITAL OF NEW PERSIA

The huge vault on the right was built over the enormous hall below, without any supporting timbers during the course of construction. It is 84 feet across and is the largest masonry vault of its age still standing in Asia. Here the magnificent kings of New Persia held their splendid court, imitated by the weak Roman emperors at Constantinople. Situated almost within sight of Babylon, Ctesiphon was but one in a succession of powerful capitals occupying the river crossing on the great highway between Asia Minor and the East: Babylon, Seleucia, Ctesiphon, and, finally, Baghdad

ened Persian kings. As they took possession of the Fertile Crescent and established their capital at Ctesiphon on the Tigris, not far north of Babylon, a new Orient arose on the ruins of seemingly dead and forgotten ages. Noble examples of Persian architecture, though influenced by Greek art, again looked down upon the Tigris and Euphrates; beautiful works of the Persian artist and craftsman again began to appear; and the revered religion of Zoroaster took on new life. We have in this movement a last revival of that old Iranian race

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which produced the religion of Zoroaster and built up the vast Persian Empire. The Sassanian kings organized a much more powerful state than that of the Parthians which they had overthrown, and they regarded themselves as the rivals of the Romans for the empire of the world. The old rivalry between the Orient and the West, as in the days of Greece and Persia, was now continued, with Rome as the champion of the West, and this New Persia as the leader of the East.

Just as the family of Severus was declining, this empire of New Persia rose into power as a dangerous foe of the Roman Empire. From this time on the Roman dominion was seriously threatened on two fronts, north and east. As in Gaul, so in the East, the rise of a usurper within the Roman Empire for a time saved the region from absorption by the outside enemy. One of the eastern governors, using Palmyra as a center, gained his independence and defended the eastern frontier on his own account. After his death his widow, the beautiful Zenobia, ruled at Palmyra as queen of the East over a realm which included Asia Minor, Syria, and Egypt. Her kingdom served for a time as a buffer state, protecting the Roman Empire from attack by New Persia.

With a powerful oriental state under Zenobia holding the Eastern Mediterranean lands while an able senator named Tetricus, master of Gaul, Britain, and northern Spain, ruled the West as an independent emperor, it looked as though the Roman Empire were about to fall to pieces. The anarchy which we have already noticed within the Empire was at its worst when one of the soldier emperors, named Aurelian (A.D. 270-275), advanced against Zenobia, defeated her army, captured Palmyra and took the queen prisoner. Similar success in Gaul enabled him to celebrate a gorgeous triumph in Rome, with Zenobia and Tetricus led through the streets of the city along with the other captives who adorned his triumph. Aurelian restored some measure of order and safety. But, in order to protect Rome from the future raids of the barbarians, he built entirely around the great city the massive wall which still stands—a confession of the dangerous situation of Rome in the third century A.D. It was a little over a

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century after the death of Marcus Aurelius when the emperor Diocletian brought to an end the second century of revolution, and restored what looked like a lasting peace (A.D. 284).

The Roman Empire an Oriental Despotism

The world which issued from the disasters of the second revolution toward the end of the third century A.D. under Diocletian (A.D. 284-305) was a totally different one from that which Augustus and the Roman Senate had ruled three centuries before. Diocletian deprived the shadowy Senate of all power, except for the municipal government of the city of Rome. The Roman Senate, now reduced to a mere city council, a board of aldermen, disappeared from the stage of history. The emperor thus became for the whole Roman world what he had always been in Egypt—an absolute monarch, with none to limit his power. The state had been completely militarized and orientalized. With the unlimited power of the oriental despot the emperor now assumed also its outward symbols—the diadem, the gorgeous robe embroidered with pearls and precious stones, the throne and footstool, before which all who came into his presence must bow down to the dust.

Archaeological discovery has shown that the gorgeous costume in which the Roman emperor now decked himself was copied from that of the Sassanian kings of New Persia. The Roman leaders had seen much of this new empire of the East for two generations, and from its brilliant oriental court these outward matters of royal costume, court symbols, and customs were adopted. Oriental influence on Roman beliefs, such as we have seen in the spread of the worship of the Persian god Mithras, was now also affecting the notion of the divinity of the emperor. In these things we recognize a further stage in that commingling of the East and West begun by Alexander the Great over six hundred years before.

As a divinity, the emperor had now become an oriental Sun-god and he was officially called the Invincible Sun. His birthday was on the twenty-fifth of December; that is, about the date when the sun each year begins to turn northward

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after it has reached its southernmost limit. It was a long time before this day became the Christmas feast of the early Christians. The inhabitants of each province might revere their particular gods, undisturbed by the government, but all were obliged as good citizens to join in the official sacrifices to the head of the state as a god. With the incoming of this oriental attitude toward the emperor, the long struggle for democracy, which we have followed through so many centuries, ended in the triumph of oriental despotism.

The necessity of leading the army against New Persia, the new oriental enemy, carried the emperor much to the East. The result was that Diocletian resided most of the time at Nicomedia in Asia Minor. As a natural consequence the emperor was unable to give close attention to the West. Following some earlier examples, and perhaps remembering the two consuls of the old Republic, Diocletian therefore appointed another emperor to rule jointly with himself, to give his attention to the West. The second emperor was to live at Milan in the Po Valley, really the most important region of Italy. All government edicts, whether issued in the East or in the West, were signed by both emperors, and it was not Diocletian's intention to divide the Roman Empire, any more than it had been the purpose to divide the Republic in electing two consuls. The final result was nevertheless the division of the Roman Empire into East and West, just as it had once been divided by the war between Cæsar in the West and Pompey in the East, or the similar conflict between Octavian in the West and Antony in the East.

In order to avoid the recurrence of civil war at the death of an emperor, Diocletian endeavored to arrange the transfer of power from one emperor to the next. He and his fellow emperor each bore the title of "Augustus." The two Augustuses appointed two subordinates, to be called Cæsars. There were thus two emperors, or Augustuses, and two subordinate emperors, or Cæsars, intended to be something like vice presidents. For it was provided that at the death or resignation of either Augustus one of the Cæsars should at once take his place as Augustus, and another Cæsar was then to be ap-

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pointed. These arrangements display little statesmanship, and there was no possibility of their permanence.

In accordance with this organization, involving four rulers, the provinces of the Empire, over a hundred in number, were divided into four great groups, or prefectures, with a prefect over each. Still smaller groups of provinces, twelve in number, were called *dioceses*, mostly ruled by *vicars*, the subordinates of the prefects; while under the vicars were the governors of the separate provinces. The business of each province was organized in the hands of a great number of local officials graded into many successive ranks and classes from the lowest of these up through various ranks to the governor, then the vicar, and the prefect, and finally to the emperor himself.

The financial burden of this vast organization, begun under Diocletian and completed under his successors, was enormous, for this multitude of government officials and the clamorous army had all to be paid and supported. It was a great expense also to maintain the luxurious oriental court of the emperor, surrounded by his innumerable palace officials and servants. But now there were *four* such imperial courts, instead of one. At the same time it was still necessary to supply "bread and circuses" for the populace of the towns. In regard to taxation, the situation had grown steadily worse since the reign of Marcus Aurelius. The amount of a citizen's taxes therefore continued to increase, and finally little that he possessed was free from taxation.

When the scarcity of coin forced the government to accept grain and produce from the delinquent taxpayer, taxes had become a mere share in the yield of the lands. The Roman Empire thus sank to a primitive system of taxation already thousands of years old in the Orient. It was now customary to oblige a group of wealthy men in each city to become responsible for the payment of the entire taxes of the district each year; and, if there was a deficit, these men were forced to make up the lacking balance out of their own wealth. The penalty of wealth seemed to be ruin, and there was no motive for success in business when such prosperity meant ruinous overtaxation.

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Many a worthy man secretly fled from his lands to become a wandering beggar, or even to take up a life of robbery and violence. The Roman Empire had already lost, and had never been able to restore, its prosperous *farming class*. It now lost likewise the enterprising and successful *business men* of the middle class. Diocletian therefore endeavored to force these classes to continue their occupations. He enacted laws forbidding any man to forsake his lands or occupation. The societies, guilds, and unions in which the men of various occupations had long been organized were now gradually made obligatory, so that no one could follow any calling or occupation without belonging to such a society. Once a member he must always remain in the occupation it implied.

Thus under this oriental despotism there disappeared in Europe the liberty for which men had striven so long, and the once free Roman citizen had no independent life of his own. For the will of the emperor had now become law, and as such his decrees were dispatched throughout the length and breadth of the Roman dominions. Even the citizen's wages and the prices of the goods he bought or sold were as far as possible fixed for him by the state. The emperor's innumerable officials kept an eye upon even the humblest citizen. They watched the grain dealers, butchers, and bakers, and saw to it that they properly supplied the public and never deserted their occupation. In some cases the state even forced the son to follow the profession of his father. In a word, the Roman government now attempted to regulate almost every interest in life, and wherever the citizen turned he felt the control and oppression of the state.

Staggering under this crushing burden or taxes, in a state which was practically bankrupt, the citizen of every class had now become a mere cog in the vast machinery of the government. He had no other function than to toil for the state, which exacted so much of the fruit of his labor that he was fortunate if it proved barely possible for him to survive on what was left. As a mere toiler for the state, he was finally where the peasant on the Nile had been for thousands of

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years. The emperor had become a Pharaoh, and the Roman Empire a colossal Egypt of ancient days.

The century of revolution which ended in the despotic reorganization by Diocletian completely destroyed the creative ability of ancient men in art and literature, as it likewise crushed all progress in business and affairs. In so far as the ancient world was one of progress in civilization, its history was ended with the accession of Diocletian. Nevertheless, the Roman Empire had still a great mission before it, in the preservation of at least something of the heritage of civilization, which it was to hand down the centuries to us of today. Moreover, it was out of the fragments of the Roman Empire that the nations of modern Europe grew up. We are now to watch it then as it falls to pieces, still mechanically maintaining its hold upon its mighty heritage from the past and furnishing the materials, as it were, out of which our world of today has been built up.

The Division of the Empire and the Triumph of Christianity

Under Diocletian Italy had been reduced to the position of a taxed province, and had thus lost the last vestige of superiority over the other provinces of the Empire. The dangerous flood of German barbarians along the lower Danube and the threatening rise of New Persia had drawn the emperor into the northeast corner of the Empire. During the century of revolution just past, the Illyrian soldiers of the Balkan Peninsula had filled the army with the best troops and furnished more than one emperor. An emperor who had risen from the ranks of provincial troops in the Balkans felt little attachment to Rome. Not only had Rome ceased to be the residence of an emperor, but the center of power had clearly shifted from Italy to the Balkan Peninsula. The movement was the outcome of a reviving respect for the East and a long growing interest in the Balkan Peninsula, observable even as early as Hadrian, who spent vast sums in the beautification of Athens. After the struggles following Diocletian's death—struggles which his arrangements for the succession failed to prevent—the emperor Constantine the Great emerged victorious (A.D.

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324). He did not hesitate to turn to the eastern edge of the Balkan Peninsula and establish there a New Rome as his residence.

The spot which he selected showed him to be a far-seeing statesman. He chose the ancient Greek town of Byzantium, on the European side of the Bosphorus—a magnificent situation overlooking both Europe and Asia, and fitted to be a center of power in both. In placing his new capital here, Constantine established a city the importance of which was equaled only by Alexandria in Egypt. The emperor stripped many an ancient city of its great monuments in order to secure materials for the beautification of his splendid residence. By A.D. 330 the new capital on the Bosphorus was a magnificent monumental city, worthy to be the successor of Rome as the seat of the Mediterranean Empire. It was renamed Constantinople ("Constantine's city") after its founder.¹

The transfer of the capital of the Roman Empire to the east side of the Balkan Peninsula was a decided triumph for the older civilization of the Eastern Mediterranean. But it meant the separation of East and West—the cutting of the Roman Empire in two. Although the separation did not take place abruptly, yet within a generation after Constantinople was founded, the Roman Empire had in fact if not in name become two states, and they were never more than temporarily united again. Thus the founding of Constantinople sealed the doom of Rome and the Western Mediterranean lands of the Empire. For a time the eastern half of the Empire, ruled by Constantinople, was greatly strengthened by Diocletian's reorganization. Nevertheless, it too was doomed to steady decline. We have seen that citizenship in the Roman Empire no longer meant a share in the control of public affairs. Able men of affairs were no longer arising among such citizens, except as the army raised one of its commanders to the position of emperor. Peaceful civil life was no longer producing statesmen to control government affairs as in the days of the Roman and Greek republics.

¹ The Arabic form of this name is *Stambûl*, from which the official Turkish form *Istanbul* is derived.

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In this situation, as the Christian churches steadily increased in numbers and their influence grew, they more and more needed the guidance of able men. The management of the great Christian communities and their churches called for increasing ability and experience. Public discussion and disputes in the church assemblies enabled gifted men to stand forth, and their ability brought them position and influence. The Christian church thus became a new arena for the development of statesmanship, and church statesmen were soon to be the leading influential men of the age, at a time when the civil responsibilities of the old democracies had long since ceased to produce such men.

These officers of the church gradually devoted themselves more and more to church duties until they had no time for anything else. They thus came to be distinguished from the other members and were called the *clergy*, while the people who made up the membership were called the *laymen*, or *laity*. The old men who cared for the smaller country congregations were finally called merely *presbyters*, a Greek word meaning "old men," and our word "priest" is derived from this Greek term. Over the group of churches in each city, a leading priest gained authority as bishop. In the larger cities the bishops had such influence that they became archbishops, or head bishops, having authority over the bishops in the surrounding cities of the province. These church arrangements were modeled to a large extent on those of the Roman government, from which such terms as "diocese" were borrowed. Thus Christianity, once the faith of the weak and the despised, became a powerful organization, strong enough to cope with the government.

The Roman government therefore began to see the uselessness of persecuting the Christians. The struggle to suppress them was one which decidedly weakened the Roman state at a time when the long disorders of the century of revolution made the emperors feel their weakness. After the retirement of Diocletian, his "Cæsar" Galerius, feeling probably the dangers threatening Rome from *without* and the uselessness of the struggle against the Christians *within*, issued a decree, in

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A.D. 311, by which Christianity was legally recognized. Its followers received the same legal position granted to the worshipers of the old gods. This decree was also maintained by Constantine, and under his direction the first great assembly, or council, of all the churches of the Roman world was held at Nicæa, in northeastern Asia Minor.

The victory of Christianity was not yet final, however. After Constantine's sons and nephews had spent years in fighting for the crown, which one of the sons held for a time, the survivor among the group was Constantine's nephew Julian (A.D. 361-363), the ablest emperor since the second century of peace. Like Marcus Aurelius, he was a philosopher on the throne; for he was devoted to the old literature and philosophy of the Greeks. He therefore renounced Christianity and did all that he could to retard its progress and to restore Hellenistic religion and civilization. He was an able general also. He defeated the German barbarians in the West, but while leading his army in the East against the New Persians he died. The Church called him Julian "the Apostate"; he was the last of the Roman emperors to oppose Christianity.

THE TRIUMPH OF THE BARBARIANS AND THE
END OF THE ANCIENT WORLD*The Barbarian Invasions and the Fall of the Western Empire*

WE HAVE often met the Indo-European barbarians who occupied northern Europe, behind the civilized belt on the north of the Mediterranean. Since the days of Stone Age men this northern region had never advanced to a high civilization. Its barbarian peoples had been a frequent danger to the fringe of civilized nations along the Mediterranean. We recall how the Gauls overwhelmed northern Italy, even capturing Rome, and how they then overflowed into the Balkan Peninsula and Asia Minor. We remember the terror at Rome when the Germans first came down, and how they were defeated only by a supreme effort under the skillful soldier Marius.

By superior organization the Romans had been able to feed and to keep together at a given point for a long time a larger number of troops than the barbarians. This was the secret of Cæsar's success against them. During the century of revolution after the reign of Marcus Aurelius, Roman army organization had gone to pieces and the barbarians raided the lands of the Empire without hindrance. After such raids they commonly withdrew. By the time of Diocletian, however, they were beginning to form permanent settlements within the limits of the Empire, and there followed two centuries of barbarian migration, in the course of which they took possession of the entire Western Mediterranean world.

The Germans were a fair-haired, blue-eyed race of men of towering stature and terrible strength. In their native forests of the north each German people or nation occupied a very limited area, probably not over forty miles across, and in numbers such a people had not usually more than twenty-five or thirty thousand souls. They lived in villages, each of about a hundred families, and there was a head man over each village. Their homes were but slight huts, easily moved. They had little interest in farming the fringe of fields around the village, much preferring their herds, and they shifted their

homes often. They possessed no writing and very little in the way of industries, manufactures, or commerce. A group of noble families furnished the leaders (dukes), or sometimes kings, governing the whole people.

Hardened to wind and weather in their raw northern climate, they yielded to their native fearlessness and love of war and plunder, which often led them to wander, followed by their wives and families in heavy wagons. An entire people might comprise some fifty villages, but each village group remained together, protected by its body of about a hundred warriors, the heads of the village families. When combined, these hundreds made up an army of five to six thousand men. Each hundred held together in battle, as a fighting unit. They all knew each other; the village head man, the leader of the group, had always lived with them; the warrior in the tumult of battle saw all about him his friends and relatives, the sons of his brothers, the husbands of his daughters. In spite of lack of discipline, these fighting groups of a hundred men, united by such ties of blood and daily association, formed battle units as terrible as any ever seen in the ancient world. Their eager joy in battle and the untamed fierceness of their onset made them irresistible.

The highly organized and carefully disciplined Roman legions, which had gained for Rome the leadership of the world, were now no more. Legions made up of the peace-softened townsmen of Diocletian's time, even if they had existed, would have given way before the German fighting groups, as chaff is driven before the wind. Hopeless of being able to drive the Germans back, the emperors had allowed them to settle within the frontiers. Indeed, the lack of men for the army had long since led the emperors to hire the Germans as soldiers, and Julius Cæsar's cavalry had been largely barbarian. A more serious step was the admission of *entire* German peoples to live in the Empire in their accustomed manner. The men were then received into the Roman army; but they remained under their own German leaders and they fought in their old village units. For it was only as the Roman army was made up of the German fighting units that it had any effec-

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tiveness. Barbarian life, customs, and manners were thus introduced into the Empire, and the Roman army as a whole was barbarian. At the same time the German leaders of such troops were recognized as Roman officers.

Along the lower Rhine there lived under a king a powerful group of German peoples, called the Franks. The Vandals, also in the north, had long borne an evil reputation for their destructive raids. South of them, the Alemanni had frequently moved over the frontiers, and on the lower Danube the Goths were a constant danger. Constantine's nephew Julian had gained a fierce battle against the Germans at Strassburg (A.D. 357), and had thus stopped the Franks and Alemanni at the Rhine. He established his headquarters at Paris, where he still continued to read his beloved books in the midst of the campaign. The philosopher-emperor's stay at Paris, almost sixteen centuries ago, for the first time brought clearly into history that important city of future Europe.

This constant commingling of the German peoples with the civilized communities of the Empire was gradually softening their northern wildness and giving them not only familiarity with civilization but also a respect for it. Their leaders, who held office under the Roman government, came to have friends among highborn Romans. Such leaders sometimes married educated Roman women of rank, even close relatives of the emperors. Some of them too were converted to Christianity. An educated Goth named Ulfilas translated the New Testament into Gothic, a language akin to German. As the Germanic peoples possessed no writing, he was obliged to devise an alphabet from Greek and Latin for writing Gothic. He thus produced the earliest surviving example of a written Germanic tongue and aided in converting the northern peoples to Christianity.

At this juncture barbarians of another race, having no Indo-European blood in their veins, had been penetrating Europe from Asia. These people were the Huns. They were the most destructive of all the barbarian invaders. They pushed down upon the lower Danube, and the West Goths (often called Visigoths), fleeing before them, begged the Romans for per-

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mission to cross the Danube and settle in the Empire. Valens, who had followed Julian as emperor of the East, gave them permission to do so. Thereupon friction between them and the Roman officials caused them to revolt. In the battle which ensued at Adrianople (A.D. 378), although the Goths could not have had an army of over fifteen thousand men, the Romans—or rather the Germans fighting for them—were defeated, and the emperor Valens himself was killed. Henceforth the helplessness of the Roman Empire was evident to all the world. This movement of the West Goths and the battle of Adrianople were the beginning of a century of continuous migration in which the Western Empire was slowly absorbed by the barbarians and broken up into German kingdoms under German military leaders.

Theodosius, who succeeded Valens as ruler in the East, was the last of the great emperors to unite and rule the whole Roman Empire. He came to an understanding with the West Goths, allowing them to settle where they were, taking them into his army, and giving their leaders important posts in the government. But it was only by using the able and energetic Germans themselves as his ministers and commanders that he was able to maintain his empire. He even gave his niece in marriage to his leading military commander, a Vandal named Stilicho, and at his death, in A.D. 395, Theodosius entrusted to this able German the care of his two young sons, Honorius and Arcadius.

Theodosius divided the Empire between these two youths, giving to Arcadius the East and to Honorius the West. The rulership of the Empire was never to be united again. Indeed, after the appearance of these two young emperors, the dismemberment of the Western Empire went rapidly forward, and in two generations resulted in the disappearance of both the Western emperor and his empire. For the West Goths under Alaric, having plundered Greece at will, invaded Italy also, and in A.D. 410 captured the Eternal City.¹ Within a generation after A.D. 400 the Western Empire had dwindled to

¹ About 400 B.C. Rome was captured by the *Gauls*, and a few years after A.D. 400 it was captured by the *Goths*.

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Italy itself, and even there the emperor of the West was entirely in the hands of his German officials and commanders. With the defeat of Attila and his terrible barbarian host, as they were threatening Italy, the Hunnish empire fell to pieces, never to trouble Europe again. Hardly had Rome thus escaped when the Vandals, having entered Africa through Spain, crossed over from Carthage to Sicily and Italy, and in A.D. 455 they captured Rome. Although they carried off great quantities of spoil, they spared the magnificent buildings of the city, as Alaric and his West Goths had also done forty-five years earlier.

In Italy (all that was left of the Western Empire) the German military leaders possessed the power and made and unmade emperors as they pleased. But these *seeming* emperors of the West were now to disappear. By a remarkable coincidence the last to bear the title was called Romulus Augustulus; that is, Romulus, "the little Augustus." He thus bore the names both of the legendary founder of Rome itself and of the founder of the Roman Empire. He was quietly set aside by the German soldiery, who put Odoacer, one of their number, in his place. Thus in A.D. 476, two generations after Theodosius, the last of the Western emperors disappeared. The line of emperors at Rome therefore ended a little over five hundred years after it had been established by Augustus. With the disappearance of the Western emperors, the invading barbarians had completely girdled the Western Mediterranean basin. It was never again to merge into a politically coherent Mediterranean world, and much of it relapsed into a condition little better than the prehistoric barbarism from which it had been raised by Greek and Phœnician colonization and later by the Roman conquests.

The Eastern Mediterranean world, while it by no means escaped the barbarian invasions, was further south and somewhat less accessible. It continued to be ruled by the successors of the Roman emperors residing at Constantinople, where for more than a century after the death of Theodosius (A.D. 395) one half-orientalized weakling followed another on the throne. Justinian, however, who was crowned at Constantinople in

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A.D. 527, was a gifted and energetic ruler. His dream was the restoration of the united Empire. Accordingly, he destroyed the new barbarian kingdom of the East Goths, which had grown up in Italy after A.D. 493 under the wise leadership of Theodoric the Great. This attempt of Justinian to reconquer the West was a mistake, for the Eastern Empire did not possess the power again to rule the whole Mediterranean world. The destruction of the Gothic kingdom left Italy helpless before the next wave of barbaric migration, and the successors of Justinian were unable to maintain his conquests.

But if political unity failed, the emperor's large plans did succeed in establishing a great judicial or legal unity. He employed a very able lawyer named Tribonian to gather together all the numerous laws which had grown up in the career of Rome since the age of the Twelve Tablets a thousand years before. Justinian was the Hammurabi of the Roman Empire, and the vast body of laws which he collected represented the administrative experience of the most successful rulers of the ancient world. Almost every situation and every difficulty arising in social life, in business transactions, or in legal proceedings had been met and settled by Roman judges. The collection of their decisions arranged by Justinian in brief form was called a digest. Justinian's Digest became the foundation of law for later ages, and still remains so to a large extent in the government of the civilized peoples of today.

Under Justinian, Constantinople enjoyed wide recognition and the emperor gave lavishly for its **beautification**. But it was no longer for the erection of temples to the old gods, or for basilicas and amphitheaters that the ruler gave his wealth. The old world of Greek civilization had received its last support from Julian, two centuries earlier. Theodosius, the last emperor to rule the entire Empire, had forbidden the worship of the old gods and issued a decree closing all their temples. After A.D. 400 the splendid temples of the gods, fringing the Mediterranean and extending far up the Nile, were left more and more forsaken by their worshipers, till finally they were deserted and desolate as they are today, or they were altered for use as Christian churches. The last blow to what the

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Church regarded as Greek paganism was struck by Justinian, who closed the schools of philosophy forming the university at Athens. The buildings to which the emperor now devoted his wealth were churches. The vast church of Saint Sophia which he built at Constantinople still stands, the most magnificent of the early churches of the East.

Just as this building shows its oriental origin in its architecture, so did the teachings of the Church in the Eastern Empire. The efforts of Justinian to unite East and West failed to a large extent because of the jealousy of the oriental churches and the power of the Western Church. A division was therefore steadily developing between the Eastern (Greek) Church and the Western (Latin) Church. For while the dismemberment of the Western Empire, which we have followed, was still going on, there was arising at Rome an emperor of the church, who was in no small degree the heir to the lost power of the Western emperor. As there had been an Empire of the East and an Empire of the West, so there were to be also a Church of the East and a Church of the West. To the Western Church we must now turn.

The Triumph of the Roman Church and Its Power over the Western Nations

The venerable city of Rome, with its long centuries as mistress of the world behind it, had gained a position of unique respect and veneration, even among the barbarians. The Goths and the Vandals had stood in awe and reverence under the shadow of its magnificent public buildings. They had left them uninjured, and in all its monumental splendor, Rome was still the greatest city of the world, rivaled only by Constantinople and Alexandria, the two other imperial cities. It was natural that the bishop of Rome should occupy a position of unusual power and respect. When the West Goths were threatening the city, and also in other important crises caused by the incoming of the barbarians, the bishop of Rome had more than once showed an ability which made him the leading statesman of Italy, if not of the West. There is no doubt that his influence had much to do with the respect which the

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West Goths and the Vandals had shown toward the city in sparing its buildings.

At the same time the church throughout the West had early produced able men. This was especially true in Africa, the province behind Carthage, where the leading early Christian writers had appeared. The bishop of Carthage was soon a serious rival of the bishop of Rome, and their rivalry in Christian times curiously reminds us of the long past struggle between the two cities for the leadership of the Western Mediterranean. Here in Africa in the days of Theodosius, Augustine (A.D. 354-430), the greatest of the thinkers of the early church, had arisen. Not at first a Christian, the young Augustine had been devoted to Greek philosophy and learning. At the same time he gave way to evil habits and uncontrolled self-indulgence. As he gained a vision of spiritual self-denial, his faithful Christian mother, Monica, followed him through all the tremendous struggle and distress of mind, from which he emerged at last into triumphant conquest of his lower nature and the devotion of his whole soul to Christianity. In a volume of *Confessions* he told the story, which soon became the never-failing guide of the tempted in the Christian church. Along with the *Meditations* of Marcus Aurelius, it belongs among the most precious revelations of the inner life of a great man which we have inherited.

In the days after Alaric had plundered Rome and earthly government seemed to totter, Augustine wrote also a great treatise which he called *The City of God*, meaning the government of God. Opposed to the governments of this world and superior to them, he pictured an invisible kingdom of God, to which all Christian believers belonged. But this invisible kingdom was after all hardly distinguished by Augustine from the visible organized church with its bishops and priests. To the authority of this eternal kingdom—that is, to the authority of the church—all believers were urged by Augustine to submit without reservation. In the teaching of Augustine, therefore, the church gained complete control over the beliefs of men. This was at the very same time when the Edict of Theodosius was closing the temples of the old gods.

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The state was thus assuming the power to suppress all other beliefs, and henceforth it maintained its power over both the bodies and the minds of its subjects. In accordance with this idea Justinian had closed the university at Athens in order to stop freedom of thought and the teaching of the old philosophy. To the authority of the state over the beliefs of its people, Augustine added the authority of the church. Thus ended all intellectual liberty in the ancient world.

Augustine, moreover, recognized the leadership of the Church at Rome, and so added his influence to a tendency already long felt by all. For it was widely believed that Christ had conferred great power in the church upon the Apostle Peter. Although it was known that Paul also had worked in Rome, early tradition told how Peter had founded the church there and become its bishop. It was also held that Peter had transferred his authority to his successors as bishops at Rome. Tradition thus aided in establishing the supremacy of the bishop of Rome.

As increasing numbers of men withdrew from worldly occupations and gathered in communities, called monasteries, to lead holy lives or to help carry the Christian faith to the northern barbarians, these beliefs regarding the church of Rome went with them. The *monks*, as they were called, taught the barbarians that the church also had power over the life hereafter. Dreading frightful punishments beyond the grave, the superstitious peoples of the north submitted readily to such influences, and the church gained enormous power over the barbarians. It was a power wielded more and more exclusively by the bishop of Rome.

When the power of the Roman Empire was no longer able to restrain the barbarians, the influence of the church held them in check. The church gradually softened and modified the fierce instincts of barbarian kings ruling over barbarian peoples. The barrier of Roman organization and of Roman legions which had protected Mediterranean civilization had given way; but the church, taking its place, made possible the transference of power from the Roman Empire to the bar-

THE TRIUMPH OF THE ROMAN CHURCH

barians in the West, without the complete destruction of our heritage of civilization bequeathed us by Greece and Rome.

The church had been founded in the beginning chiefly among the lowly and the ignorant. It had originally been without higher Greek civilization, learning, and art. Gradually it gained also these things, as men like Augustine arose. It is chiefly to the libraries of the monks in the monasteries, and to their practice of copying ancient literary works, that we owe the preservation of such Latin literature as has survived. Today our oldest and most important copies of such things as Virgil's *Æneid* are manuscripts written on parchment, preserved in the libraries of the Christian monks.

Art was slow to rise among early Christians, and for a thousand years or more there were no Christian painters or sculptors to be compared with those of Greece. In Constantinople the art of the painters of Syria was developed by Christian painters into the art which we now call Byzantine because it was dominated by Constantinople (Byzantium). In the mosaics of the early Italian churches, such as San Vitale at Ravenna, we see this Byzantine art transplanted to the West; and painting likewise, as it arose in Christian Europe, was a descendant of oriental art. The figures of the Christian saints, wearing on their heads the golden aureoles which have also been found adorning the old oriental gods in paintings of the second century A.D. (Fig. 176), still proclaim the oriental origin of the early art of Christian Europe.

Similarly the need for places of sacred assembly led to the rise of great architects among the early Christians. Influenced chiefly by the old business basilica, they devised noble and impressive assembly rooms for the early congregations in the days of Constantine. We still call such a church a basilica, to indicate its form. In the basilica churches we find the outcome of that long architectural development of thirty-five hundred years, from the earliest known clerestory at the pyramids of Gizeh to the Christian cathedral. The tripartite arrangement of such a basilica, with a higher roof over the nave in the middle and a lower roof over the side aisles, offered an inviting opportunity to erect in front of it a façade practically

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identical with the Roman triumphal arch drawn from the front of the Assyrian palace. Such a façade placed the high central arch directly in front of the basilica nave, and the lower arches on each side in front of the side aisles with their

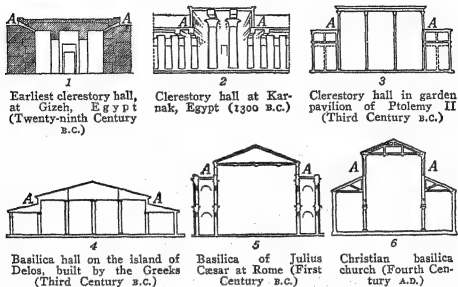


FIG. 178. THE BASILICA CHURCH AND ITS ORIENTAL ANCESTORS

A central aisle with roof windows (A) in the side walls, forming a clerestory and occupying the difference in level between the higher roof over the central aisle (nave) and the lower roof over the side aisles, with a resulting division of the building into three aisles—this arrangement is the chief characteristic of the basilica cathedral. We found the earliest hint of such an arrangement at the pyramids of Gizeh, shown in cross section above (1). Its clerestory windows (AA) were mere light chutes, which, however, were finally developed by the Egyptian architects into tall, stately clerestory windows, as at Karnak (2, AA). The Hellenistic architect adopted the old Egyptian arrangement of a high roof in the middle and a lower roof on each side for the garden pavilion of Ptolemy II (3, AA). In the same age the Greeks adopted the form and combined it with their sloping roofs, as shown here in a business hall excavated by the French on the island of Delos (4, AA). The Greeks gave this form of hall its name "basilica." In Rome it was in use in the second century B.C. in the Forum, and we have put in the above series the great basilica of Julius Caesar (5). Finally, these business basilica halls of the Greeks and Romans influenced the early Christian architects to adopt a similar form for their churches (6).

lower roof. In this way the Assyrian palace front and the Egyptian clerestory hall, represented by their Mediterranean descendants, were combined to form the Christian cathedral of Europe.

LAST REVIVAL OF THE ORIENT: THE MOSLEMS

Thus the faith of Jesus, an oriental teacher, was sheltered in beautiful buildings which clearly disclosed their oriental ancestry. These Christian buildings, therefore, like the faith they sheltered, are a striking example of how the world of later Europe reached back into that early Orient with which we began the story of civilization, when Europe was still in the Stone Age. And that ancient Orient, whose civilization thus survived in the life of Europe, was yet to rise once more, to dominate the Mediterranean as it had so often done before. To this final revival of the Orient we must now turn.

The Final Revival of the Orient and the Forerunners of the Nations of Modern Europe

Justinian, whose reign covered the middle years of the sixth century A.D., was, as we have already said, the last great ruler of the Eastern Empire. His endeavors to reunite the Empire and to adorn his capital both proved very disastrous. He spent the strength of his Empire in trying to regain the West, when he needed all his resources to defend himself against the New Persians, who assailed the eastern frontier in war after war. His great buildings, especially the magnificent church of Saint Sophia, required so much money that his treasury was emptied and the government was bankrupt. From the mistakes of Justinian the Eastern Empire never recovered, and at his death it entered upon an age of steady decline.

Meantime a new invasion of barbarians was bringing in the Slavs, a non-German group of Indo-European peoples. They poured into the Balkan Peninsula to the gates of Constantinople and even down into Greece. They were soon holding much of the same territory in these regions which they still occupy. Under these circumstances the Eastern Empire at Constantinople, although it was without interruption the direct descendant of the Roman Empire, was no longer Roman. The Eastern Empire became, as it was in population and civilization, a mixed Greek-Slavic-Oriental state.

Moreover, a vast section of the eastern emperor's dominions lay in the Orient. Of these eastern dominions a large part was

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now about to be invaded and seized by a great Semitic migration like those which we have repeatedly seen as the nomads of the Arabian Desert overspread Babylonia; or as the Hebrews swept in from the desert and seized the towns of Palestine. The last and the greatest movement of the Semitic barbarians was now about to take place. In A.D. 570, not long

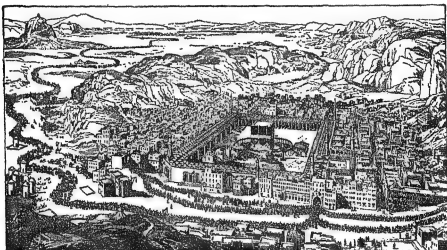


FIG. 179. A BIRD'S-EYE VIEW OF MECCA AND ITS MOSQUE

Mecca is one of the few towns in the barren Arabian peninsula; for by far the great majority of the Arabs live as roving shepherds and not in towns. Mecca had been a sacred place long before the time of Mohammed, and the people had been accustomed to come there as pilgrims, to do homage to a sacred black stone. Mohammed did not interfere with these customs. After his death the Moslems built a large court modeled on a colonnaded Greek market place. This structure was the simplest form of mosque. Over the black stone they erected a square shelter called the *Kaaba*, which we see in the middle of the mosque court. To this place the Moslem believers still come in great numbers every year as pilgrims. Our sketch shows an exaggerated representation of the procession of pilgrims. In his later years Mohammed lived at Medina, over 200 miles north of Mecca, and the pilgrims also visit his tomb there

after the death of Justinian, there was born in Mecca in Arabia a remarkably gifted lad named Mohammed. As he grew up he believed, like so many Semitic teachers, that a commanding voice spoke within him as he wandered in the wilderness. This inner voice brought him messages which he felt compelled to communicate to his people as teachings from God, whom he called *Allah*. After much persecution and

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great danger to his life, he gathered a group of faithful followers about him, and when he died, in A.D. 632, he had established a new religion among the Arabs, which he had called *Islam*, meaning "surrender, reconciliation"; that is, reconciliation to Allah, the sole God. The new believers he had called *Muslims*, or, as we spell it, Moslems, meaning "the reconciled." By us they are often called Mohammedans, after their prophet. After Mohammed's death the Moslem leaders gathered together his teachings, till then uncollected, and copied them to form a book called the Koran, now the Bible of the Moslems.

The Moslem leaders who inherited Mohammed's power were called *caliphs*, a word meaning "substitute." As rulers, they proved to be men of the greatest ability. They organized the untamed desert nomads, who now added a burning religious zeal to the wild courage of barbarian Arabs. This combination made the Arab armies of the caliphs irresistible. Within a few years after Mohammed's death they took Egypt and Syria from the feeble successors of Justinian at Constantinople. They thus reduced the Eastern Empire to little more than the Balkan Peninsula and Asia Minor. At the same time the Arabs crushed the empire of the New Persians and brought the Sassanian line of kings to an end (A.D. 640) after it had lasted a little over four hundred years. Thus the Moslems built up a great oriental empire, with its center at the east end of the Fertile Crescent.

The Moslem capital which was built at Baghdad, near the New Persian royal residence of Ctesiphon, became eventually the finest city of the East and one of the most splendid in the world. The caliphs extended their power eastward to the frontiers of India. Westward the Moslems pushed along the African coast of the Mediterranean, as their Phoenician kindred had done before them. It was the Moslem overthrow of Carthage and its bishop which now relieved the bishop of Rome (the Pope) of his only dangerous rival in the West. Only two generations after the death of Mohammed the Arabs crossed over from Africa into Spain (A.D. 711). As they moved on into France they threatened to girdle the entire Mediter-



FIG. 180. A PAGE OF A MANUSCRIPT COPY OF THE KORAN

This writing has descended from the ancient alphabet of the Phœnicians, and, like it, is still written and read from right to left. The Arab writers like to give it decorative flourishes, producing a handsome page. The rich decorative border is a good example of Moslem art. The whole page was done by hand. In such hand-written books as these the educated Moslems wrote out translations of the books of the great Greek philosophers and scientists, like Aristotle; for example, one of the most valuable of the books of Ptolemy, the Greek astronomer, and of Hero, the great physicist, we now possess only in Arabic translations. At the same time the Moslems wrote their own treatises on algebra, astronomy, grammar, and other sciences in similar books, to which the West owes much

raanean. At the battle of Tours (A.D. 732), however, just a hundred years after the death of Mohammed, the Moslems were unable to crush the Frankish army under Charles Martel. They withdrew permanently from France into Spain, where they established a western Moslem kingdom which we call Moorish. The magnificent buildings which it left behind are the most splendid in Spain to-day.

The Moorish kingdom developed a civilization far higher than that of the Franks, and indeed the highest in Europe of that age. Thus while Europe was sinking into the ignorance of the Middle Ages, the Moslems, by absorbing the surviving scientific literature of the Greeks, became the leading students of science, astronomy, mathematics, and grammar. There was soon much greater knowledge of these matters among the Moslems than in Christian Europe. Such Arabic words as *algebra* and the written form of our numerals, which were transmitted to us from India by the Arabs, suggest to us how much we owe to them.

As we look out over this final world situation, we see

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lying in the middle the remnant of the Roman Empire ruled by Constantinople, holding little more than the Balkan Peninsula and Asia Minor; while on one side was the lost West, made up of the German kingdoms of the former northern barbarians; and on the other side was the lost East, now part of the great oriental empire of the caliphs of Baghdad. Looking at Europe apart from the East, we discover that there was at its western end a *Moslem* oriental kingdom (the Moors), while at its eastern end there was a *Christian* oriental state (Constantinople). Between these lay chiefly the German states, later to be consolidated into the Empire of Charlemagne, with great numbers of Slavs on the east of it, and detached German peoples in the outlying island of Britain. Out of these fragments of the Roman Empire and the newly formed nations of the North, the nations of modern Europe came forth. In France and the two southern peninsulas of Spain and Italy, Latin speech survived among the people, to become French, Spanish, and Italian; while in the island of Britain the German language spoken by the invading Angles and Saxons mingled with much Latin and French to form our own English speech, written with Roman letters inherited from Greece, Phœnicia, and Egypt.

Thus Rome left her stamp on the peoples of Europe, still evident not only in the languages they use but also in many other important matters of life, and especially in law and government. In Roman law, still a power in modern government, we have the great creation of Roman genius, which has more profoundly affected the later world than any other Roman institution. Another great achievement of Rome was the universal spread of that international civilization brought forth by Greece under contact with the Orient. Rome gave to this civilization the far-reaching organization which under the Greeks it had lacked. That organization, though completely transformed into oriental despotism, endured for five centuries and long withstood the barbarian invasions from the north, which would otherwise have overwhelmed the disorganized Greek world long before. The Roman state was

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the last bulwark of civilization intrenched on the Mediterranean against the Indo-European barbarians. But the bulwark, though shaken, did not fall solely or even chiefly because of hostile assaults from *without*. It fell chiefly because of decay within.

Nor did it fall everywhere; for, as we have seen, a fragment of the vast Empire still survived in the East. The emperors ruling at Constantinople traced their predecessors back in an unbroken line to Augustus, and they ruled as his successors. Founded on the site of an ancient Greek city, lying in the midst of the Greek East, Constantinople had always been Greek in both language and civilization. But at the same time, as we have seen, it was largely oriental also. Notwithstanding this, it never wholly lost the tradition of old Greek culture. Learning, even though of a mechanical type, never died out there, as it did so completely in the West; nor did art ever fall so low. As Rome declined, Constantinople became the greatest and most splendid city of Europe, exciting the admiration and surprise of all visitors from the less civilized West. Thus the last surviving fragment of the Empire, which by right of succession might still continue to call itself Roman, lived on for a thousand years after the Germans had completely conquered the West. Nor did the Germans ever gain Constantinople, but in 1453 this last remnant of the Roman Empire fell into the hands of the Turks, who have held it ever since.

Retrospect

Besides the internal decay of Rome and the triumph of the Christian Church, the other great outstanding feature of the last centuries of the Roman Empire was the incoming of the barbarians, with the result that while Mediterranean civilization steadily declined, it nevertheless slowly spread northward, especially under the influence of the Church, till it transformed the ruder life of the north. There in the region of western and northern Europe, among the crumbling monuments of the Stone Age, Christian churches now began to rise. Books and civilized government, once found only along the

RETROSPECT

Mediterranean, reached the northern shores of Europe, where grass and great forest trees were growing over the graves of the Stone Age Norsemen. What a vast sweep of the human career rises before our imagination as we picture the first church spires among the massive tombs of Stone Age men.

We have watched early man all around the Mediterranean through thousands of years of Stone Age savagery and barbarism. Toward the end of that struggle we saw civilization emerging in the Orient. One by one the first great civilized nations stood forth and took their places as if to play their parts on the vast stage of the Near East extending around the eastern end of the Mediterranean, from the Nile, through Babylonia and Assyria, to the Hittites in Asia Minor. Then on the borders of the Orient against this background of great oriental civilizations, we saw the Stone Age Europeans of the Ægean developing, under the influence of the older nations, a wonderful civilized world of their own.

Finally we beheld that far-flung northern line of Indo-European migration, stretching from the Balkans to India, shifting slowly southward through the Highland Zone to overwhelm the Mediterranean and the Fertile Crescent. The *west* end of the Indo-European migration, made up of barbarian Greeks, swept down upon the remarkable Ægean civilization, the earliest in Europe, and destroyed it. Writing, art, architecture, and shipbuilding, which had arisen on the borders of southeastern Europe, passed away, and civilization in Europe perished at the hands of the Greek nomads from the north. Civilization would have been lost entirely had not the Orient, where it was born, now preserved it. Southeastern Europe, controlled by the Greeks, was therefore able to make another start, and from the Orient it again received writing, art, architecture, shipbuilding, and many other things which make up civilization.

After having thus halted civilization in Europe for over a thousand years, the Greeks left behind their early barbarism and, developing a noble and beautiful culture of their own, they carried civilization to the highest level it ever attained. They checked the invasion of Europe by the Persians, who

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belonged to the *eastern* end of the Indo-European migration; and later, led by Alexander the Great, the Greeks destroyed the Persian Empire and carried Greek civilization to the borders of India. Then, as the Indo-European barbarians from the north again descended to the Mediterranean, Roman organization prevented civilization from being destroyed for the second time. Thus enough of the civilization which the Orient, the Greeks, and the Romans had built up was preserved, so that after long delay it rose again in Europe to become what we now find it.

The historian cannot properly usurp the office of the prophet; but as we stand at the close of our contemplation of this tremendous panorama it is, to most of us at least, not a little inspiring to realize that the life of the universe, in so far as we know it, has culminated in civilized man, the highest form of life known to us. As we look backward for the last time our minds are inevitably attracted also to the future. Today, still disclosing the successive stages of the long human career, the stone first-hatchets lie deep in the river gravels of Egypt and France; the furniture of the pile-villages rests at the bottom of the Swiss lakes; the majestic pyramids and temples announcing the dawn of civilization rise along the Nile; the silent and deserted city-mounds by the Tigris and Euphrates shelter their myriads of clay tablets; the palaces of Crete look out toward the sea they once ruled; the Hittite cities yield up the wonderful story of their newly deciphered writing; the noble temples and sculptures of Greece still proclaim the new world of beauty and of freedom first revealed by the Greeks; the splendid Roman roads and aqueducts assert the supremacy and organized control of Rome; and the Christian church spires proclaim the new ideal of universal human brotherhood. These things continue to reveal the age-long course along which the developing life of man has moved; and, in thus following his conquest of civilization, we have been following a *rising trail*.

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